

2023-2024

**This booklet contains
practice tests and rules for**

Art (grades 7-8)
Calculator Applications (grades 6-8)
Chess Puzzle (grades 6-8)
Dictionary Skills (grades 7-8)
Editorial Writing (grades 7-8)
Impromptu (grades 7-8)
Listening Skills (grades 7-8)
Maps, Graphs & Charts (grades 7-8)
Mathematics (grades 6-8)
Number Sense (grades 7-8)
Ready Writing (grades 7-8)
Science (now grades 6-8)
Social Studies (grades 7-8)

**Duplicate materials as needed.
For contest rules, refer to the
A+ Handbook or UIL website.**

**JUNIOR HIGH ACADEMIC
STUDY MATERIALS BOOKLET**

www.uiltexas.org/aplus



UNIVERSITY INTERSCHOLASTIC LEAGUE

FOR GRADER USE ONLY

Score Test Below:

_____ out of 60. Initials _____

_____ out of 60. Initials _____

Papers contending to place:

_____ out of 60. Initials _____

**To calculate final score, add Part A and Part B together.*



**University Interscholastic League
A+ Art Contest Part B • Answer Sheet**

Write your contestant number in the upper right corner, and circle your grade below.

Circle Grade Level:

4 5 6 7 8

Art Elements & Principles

Art History

- 1. A B C D
- 2. A B C D
- 3. A B C D
- 4. A B C D
- 5. A B C D
- 6. A B C D
- 7. A B C D
- 8. A B C D
- 9. A B C D
- 10. A B C D
- 11. True False
- 12. True False
- 13. True False
- 14. True False
- 15. True False

- 16. A B C D
- 17. A B C D
- 18. A B C D
- 19. A B C D
- 20. A B C D
- 21. A B C D
- 22. A B C D
- 23. A B C D
- 24. A B C D
- 25. A B C D
- 26. True False
- 27. True False
- 28. True False
- 29. True False
- 30. True False

Art Practice Test- Grades 7-8

Art Elements and Principles Section

1. What distinguishes abstract art from other art forms?
 - a) Its functional role in religious ceremonies, rituals, and places of worship.
 - b) Its borrowing of images from popular culture, like that of celebrities and advertisements
 - c) The emphasis on colors, shapes, lines, and forms to express emotions and ideas.
 - d) Its use of collage, which does not exist in representational art

2. In a black and white photograph, what kind of colors are present?
 - a) Neutral colors
 - b) Warm colors
 - c) Cool colors
 - d) Primary colors

3. Which of the following elements is most likely to appear in the foreground of a landscape painting?
 - a) The sun or moon
 - b) Colorful flowers or plants
 - c) Distant mountains or trees
 - d) A faraway castle or palace atop a hill

4. When talking about an artwork, composition refers to
 - a) the range of colors that the artist used.
 - b) the way the elements work together to create a unified whole.
 - c) emotions and feelings expressed by the artist.
 - d) The size and weight of the canvas.

5. When complementary colors are placed next to each other in an artwork,
 - a) they look gray from far away.
 - b) they intensify each other and make the colors appear brighter.
 - c) they create an optical illusion of the painting floating in midair.
 - a) they make the painting heavier and more difficult to carry.

6. What are secondary colors?
- a) Colors like black, white, gray, and beige
 - b) Colors obtained by blending primary colors
 - c) Colors made by mixing complementary pairs of colors
 - d) Colors used only by Modern and Contemporary artists
7. What is the primary difference between shape and form in art?
- a) Shape is two-dimensional, while form is three-dimensional.
 - b) Shape is abstract, while form is representational.
 - c) Shapes have depth and volume, while forms are flat.
 - d) Painters need to study shapes, but not forms.
8. What feeling or emotion do curved lines typically convey in a painting?
- a) Strength and order
 - b) Tension and instability
 - c) Sudden and rapid change
 - d) Grace, gentleness, and fluidity
9. What does rhythm add to a painting?
- a) The feeling of movement and flow
 - b) The illusion of three-dimensional space
 - c) The sound of music
 - d) A more accurate and realistic appearance
10. Which of the following would be an example of chiaroscuro?
- a) A painting with multiple points of view
 - b) A painting with bright and bold colors in a chaotic composition
 - c) A painting with strong contrasts between light and shadow to create a dramatic effect
 - d) A painting with soft and delicate brushstrokes and blended colors

True/False

11. Teal and aqua are examples of cool colors.
12. When talking about painting, “texture” can refer to the actual artwork’s surface, not just the perceived texture of the painted objects.

13. An artist's "oeuvre" typically includes only their most famous or well-known works.
14. Mixing yellow and purple makes orange.
15. The "mood" of an artwork is mainly conveyed through the facial expressions and body language of the depicted subjects.

Art History Section

16. What is the *Young Girl Plucking a Duck* primarily about?
- a) A young girl's realization of her beauty
 - b) A young person's confrontation with death
 - c) A girl's passion for cooking and food
 - d) A duck hunting expedition
17. The Renaissance period is known as a "rebirth" of which cultural influences?
- a) Ancient Egyptian and Mesopotamian
 - b) Medieval European
 - c) Eastern Orthodox
 - d) Classical Greek and Roman
18. What does *Composition with Large Blue Plane, Red, Black, Yellow, Gray* represent?
- a) A crowded marketplace filled with people
 - b) The chaos and trauma of World War I
 - c) The underlying order of the world
 - d) Nothing, it is purely abstract
19. *Banquet Still Life with Roses* reminds viewers to
- a) embrace the joy of parties and celebrations.
 - b) treasure the beauty of flowers and nature.
 - c) Appreciate the impermanence of life and cherish moments.
 - d) Value the abundance of food and luxury.

20. The Impressionists were known for capturing
- a) multiple angles of a subject simultaneously .
 - b) the idealized and timeless beauty of gods and goddesses.
 - c) the subconscious mind and dream worlds
 - d) the changing effects of natural light.
21. How does Kandinsky's *Improvisation 31 (Sea Battle)* appear at first glance?
- a) Abstract
 - b) Surreal and dreamlike
 - c) Violent and dark
 - d) Dull and colorless
22. During the Baroque period in the Netherlands, artists like Johannes Vermeer and Judith Leyster were known for painting
- a) Enormous religious frescoes to adorn grand Cathedrals
 - b) Genre paintings, still lifes, and landscapes
 - c) Cubist works
 - d) Portraits of nobility
23. The portrait *Woman Holding an Apple* appears extremely lifelike when
- a) viewed from afar.
 - b) viewed under dim lighting.
 - c) viewed through a magnifying glass.
 - d) viewed sideways.
24. What object does Romare Bearden use to symbolize the Great Migration and Underground Railroad in *Tomorrow I May Be Far Away*?
- a) A train
 - b) A map of the United States
 - c) A white dove
 - d) A red apple

25. How does Alice Neel's approach to painting portraits differ from Renaissance artists?

- a) Neel painted with well-blended brushstrokes, while Renaissance artists used loose and expressive lines.
- b) Neel's portraits were often formal in their composition, while Renaissance portraits tended to feel intimate and spontaneous.
- c) Neel captured the subject's external beauty, while Renaissance artists captured their humanity and inner emotions.
- d) Neel's approach to portraits was more about revealing the subject's true character and personality, while Renaissance artists aimed for a more idealized representation.

True/False

26. Regionalist paintings primarily showcased scenes from European cities and cultures and were highly sought after by middle-class citizens during the Dutch Golden Age.

27. During the Contemporary period, many artists settled in New York, making the city a cultural center.

28. Only those of extreme wealth and nobility had a chance to model for Caravaggio.

29. Diego Rivera painted Delfina Flores several times throughout her life, capturing her growth and development as she aged.

30. The girls in Edvard Munch's *Girls on the Pier* are smiling out at the viewer.

Art Practice Test- Grades 7-8

Key

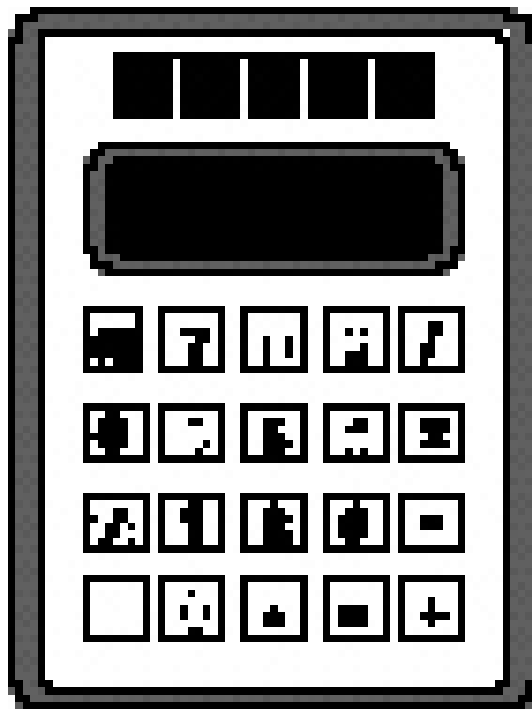
1. C
2. A
3. B
4. B
5. B
6. B
7. A
8. D
9. A
10. C
11. A
12. A
13. B
14. B
15. B
16. B
17. D
18. C
19. C
20. D
21. A
22. B
23. A
24. A
25. D
26. B
27. A
28. B
29. A
30. B

INVITATIONAL 2022-2023

A+ ACADEMICS



University Interscholastic League



Calculator Applications

**DO NOT OPEN TEST
UNTIL TOLD TO DO SO**

2022 – 2023 UIL MS Calculator Test A

23X-1. $8460 - 7910$ ----- 1= _____

23X-2. $29 - 40 - 36$ ----- 2= _____

23X-3. $1740 + 680 + 1080$ ----- 3= _____

23X-4. $\pi - 9 - 12 - 14$ ----- 4= _____

23X-5. $239 - 33 - 224 - 100$ ----- 5= _____

23X-6. $98 + 146 - 326 - 267 - 414$ ----- 6= _____

23X-7. $(\pi + 1.17 - 1.59) - (1.45 + 0.641)$ ----- 7= _____

23X-8. $(0.36 - 0.69) + (0.273 - 1.13 - 0.409)$ ----- 8= _____

23X-9. $412 \times 563 \times 70$ ----- 9= _____

23X-10. $9820 \times 249 \times 4190 \times 213$ ----- 10= _____

23X-11. What is the product of 82.8 and -562? ----- 11= _____

23X-12. Shayna ran 3.75 miles each day during cross-country season for 11 weeks. How many total miles did she run? ----- 12= _____ mi

23X-13. The grapes, that I like to eat, were selling for a price of \$1.68 per pound. If the scale that weighs the grapes states that I have bought 3.75 pounds of grapes, how much did I pay for the grapes? ----- 13=\$ _____

23X-14. $(249)[233 \times 183/152]$ ----- 14= _____

23X-15. $(-34)[142 \times 176 \times 171]$ ----- 15= _____

23X-16. $\left[\frac{275}{274}\right] [(52/243) + 0.176]$ ----- 16= _____

23X-17. $\{(108)(154 - 21)(145)\} - 8.71 \times 10^5$ ----- 17= _____

23X-18. $\frac{[179/(266)]/0.945}{(18.7 \times 29.1)(7.32)}$ ----- 18= _____

23X-19. $\left[\frac{(0.00189 + 7.18 \times 10^{-4})}{40/54}\right] \left[\frac{179}{8.85}\right]$ ----- 19= _____

23X-20. $(88.3)[373/412 \times 301/382] - 62.9$ ----- 20= _____

23X-21. $\frac{(\pi)(17/5)(14/5)}{130}$ ----- 21= _____

23X-22. $\frac{(761 + 131 - 232)}{\{(0.202 - 0.204)/(13)\}}$ ----- 22= _____

23X-23. $\frac{[-(780 + 990)(559 - 911)]}{(2.48 \times 10^{-4}/(0.115))}$ ----- 23= _____

23X-24. If the driving distance from Amarillo to Lubbock is 123.6 miles and Jack wants to travel that distance in 2 hours, what must his average speed be to accomplish this feat?----- 24= _____ mph

23X-25. If the current US postal rate for first class mail letter is 60¢ for the first ounce and 24¢ for each additional ounce, how many first class letters can I mail for \$25, if they each weigh 2 ounces? ----- 25= _____ (integer)

23X-26. During the summer of 2022, the high temperatures at my farm for one week in July were: 101°F, 103°F, 103°F, 108°F, 102°F, 104°F, and 101°F. What was the mean temperature for that week in July? ----- 26= _____ °F

23X-27. $\frac{(8.10 \times 10^{12}) + (2.23 \times 10^{12})}{(-56.5)(26) - 410}$ ----- 27= _____

23X-28. $(0.00737)[(0.572/0.552)(218 + 338)]$ ----- 28= _____

23X-29. $\frac{(0.0416 + 0.0546)(0.402 + 0.8)}{(1.76 \times 10^{12})}$ ----- 29= _____

23X-30. $\frac{1}{-0.0309} + \frac{1}{(\pi)(0.0734 - 0.0843)}$ ----- 30= _____

23X-31. $(50.6)\left[\frac{1.66}{(3.74 \times 10^{11})}\right]$ ----- 31= _____

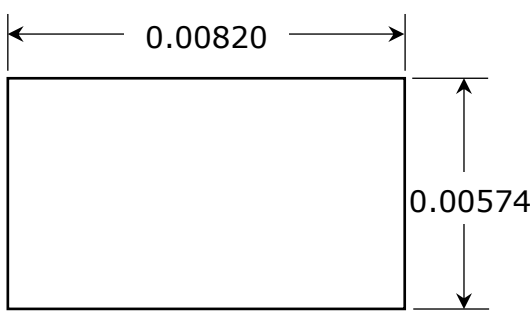
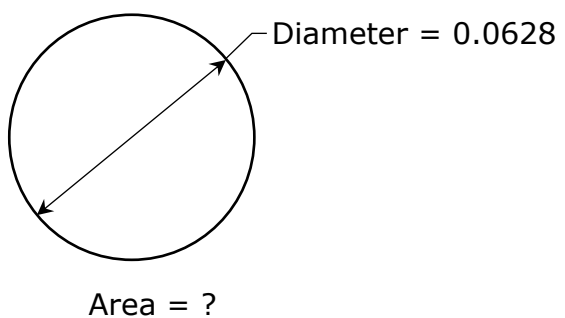
23X-32. $(7.21)[(4.41 \times 10^{-9}) - (1.45 \times 10^{-9})]$ ----- 32= _____

23X-33. $1/(0.128 - 0.0844) - 1/(0.0404)$ ----- 33= _____

23X-34. $\frac{1}{293} - \frac{1}{(363 + 429)}$ ----- 34= _____

23X-35. What is the maximum volume of air in an empty room that has 10' tall walls, a flat floor and ceiling, and measures 12' by 16' 8"?- 35= _____ ft³

23X-36. Each day at school Wesley eats breakfast and lunch. If each breakfast meal costs \$1.25 and each lunch meal costs \$2.35, how much total money does Wesley spend for eating meals on 20 days of school? 36=\$ _____

<p>23X-37.</p> <p style="text-align: center;">RECTANGLE</p>  <p style="text-align: center;">Perimeter = ?</p> <p>23X-37= _____</p>	<p>23X-38.</p> <p style="text-align: center;">CIRCLE</p>  <p style="text-align: center;">Area = ?</p> <p>23X-38= _____</p>
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23X-39. $(0.412 + 0.113 + 0.454)^2(915 + 1950)^2$ ----- 39= _____

23X-40. $\frac{(38600 + 66500)^2}{(0.0278 - 0.0269)^3}$ ----- 40= _____

23X-41. $\left[\frac{1590}{69.1}\right](89.9 + 57)^3$ ----- 41= _____

23X-42. $(3450)\sqrt{1500 + 521 + 1840}$ ----- 42= _____

23X-43. $(1/(0.00151))(2.20 \times 10^5 - 2.19 \times 10^5)^3$ ----- 43= _____

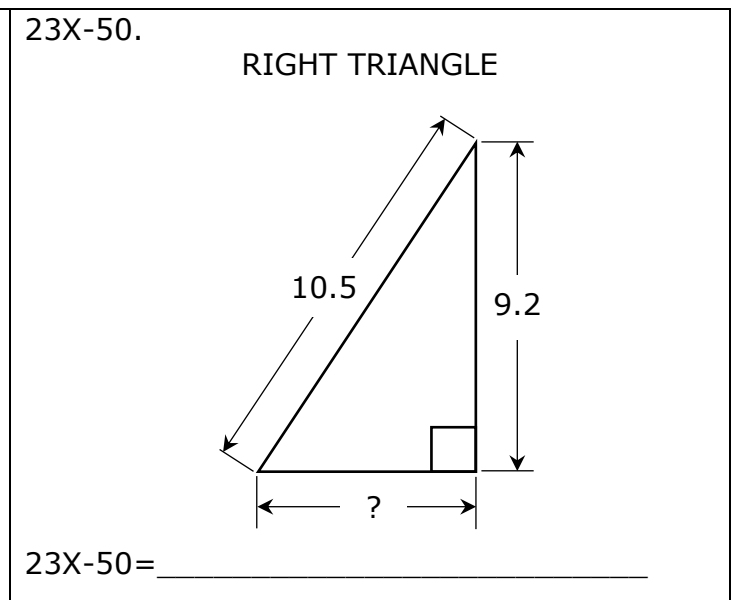
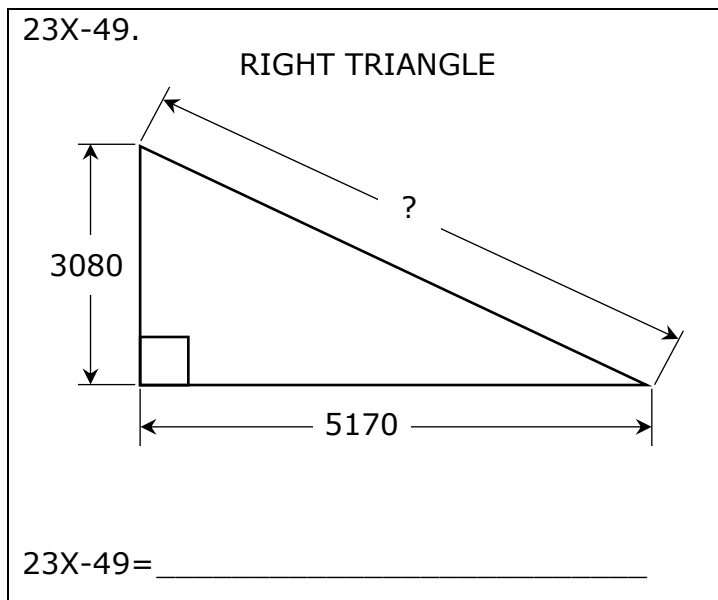
23X-44. $(1/\pi)\sqrt{\frac{0.0616 + 0.0347}{0.0651 - 0.0214}}$ ----- 44= _____

23X-45. $\left[3\sqrt{(275/526)(990)}\right]^4$ ----- 45= _____

23X-46. $(1210)\sqrt{41600 + 47800 - 7470}$ ----- 46= _____

23X-47. Genny walked south 37 meters and stopped. She then walked 70.3 meters west and stopped. What is the shortest distance back to where she started walking? ----- 47= _____ m

23X-48. Andy took a thin coffee stirrer stick that measured 6" in length and placed it in his empty coffee cup so that it touched the opposite edge of the bottom of the coffee cup. If the other end of the stirrer stick just barely touched the top rim of the coffee cup, and the circular rim had a diameter of 3.5", how deep was the coffee cup?----- 48= _____ in



23X-51. $\frac{\sqrt{0.647 + \pi + 0.773}}{(0.0364 - 0.212 + 0.2)^2}$ ----- 51= _____

23X-52. $\left[\frac{\sqrt{\sqrt{192 - 126}}}{-(12800 - 19700)} \right]^3 [2150 + 1760]$ ----- 52= _____

23X-53. $\sqrt{\frac{5.40 \times 10^8}{(560)(13500)}} + \frac{(1400 - 7810)}{(306 + 129)}$ ----- 53= _____

23X-54. $0.294 + \sqrt{(756)/(8310)} - (0.395 + 0.332)^2$ ----- 54= _____

23X-55. $\sqrt{\frac{(44500)(23100)}{(4.32 \times 10^5)(7250)}} - 0.145 + 0.457$ ----- 55= _____

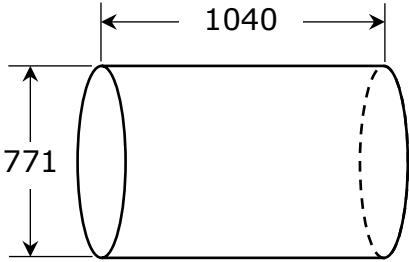
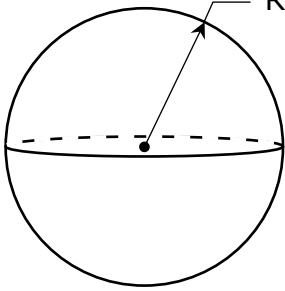
23X-56. $(58.8)^2 \sqrt{(0.593)/(27.8)} - (359 + 287)$ ----- 56= _____

23X-57. $\sqrt{\frac{(5.61)(57.2)}{(6.73) + (7.05)}} + 1/(0.769)^6$ ----- 57= _____

23X-58. $(\text{rad}) \cos(6.66) + (34.8/4.81)$ ----- 58= _____

23X-59. On a particular day, the money exchange rate for the Mexican Peso to the US Dollar was 20.8199 Pesos to 1 US Dollar, while the Chinese Yuan (¥) to Mexican Peso rate was 1 Chinese Yuan to 3.02529 Mexican Pesos. If Mr. Ortega converted \$500 to Pesos and converted his Pesos in Beijing, China to Yuan, how many Yuan did he get to spend in China? - 59= _____ ¥

23X-60. To calculate the distance a dropped object falls, in feet, you simply multiply one-half times the acceleration due to gravity times the length of time squared the object is in the air. So, if the acceleration due to gravity is 32.174 ft/sec² and the object falls for 3.17 seconds, how far does it fall? ----- 60= _____ ft

<p>23X-61. RIGHT CYLINDER</p>  <p style="text-align: center;">Volume = ?</p> <p>23X-61= _____</p>	<p>23X-62. SPHERE</p>  <p style="text-align: center;">Surface Area = 1000</p> <p>23X-62= _____</p>
---	--

23X-63. $\frac{26!/22!}{9! + 7!}$ ----- 63= _____

23X-64. (deg) $(9.3 - 42)\sin(20.8^\circ)$ ----- 64= _____

23X-65. $(205 - \pi)e^{0.662}$ ----- 65= _____

23X-66. (rad) $\frac{\cos(76.3)}{4810/548}$ ----- 66= _____

23X-67. (deg) $[192]\tan(479^\circ - 292^\circ)$ ----- 67= _____

23X-68. (deg) $\frac{\sin(13.9^\circ)}{2.13 + 0.532}$ ----- 68= _____

23X-69. (rad) $\cos[(34.8 - 43.2)(37)]$ ----- 69= _____

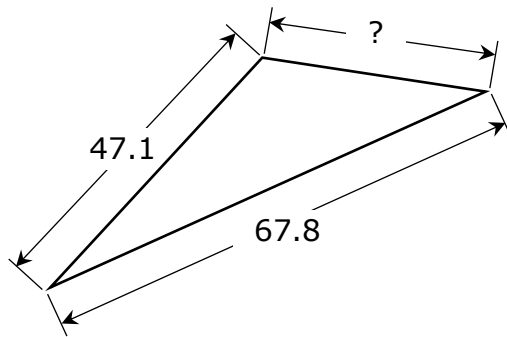
23X-70. $(411 - 356 + 500)^{2/3}$ ----- 70= _____

23X-71. The sales tax at a particular store is 6¼%. If I bought taxable items that cost \$15.89, \$29.79, and \$39.99, how much do I get back if I pay with a \$100 bill?----- 71=\$_____

23X-72. If a number is squared, then multiplied by two and added to nineteen times that same number, the result is 100. What is that number if it is a positive number?----- 72= _____

23X-73.

SCALENE TRIANGLE

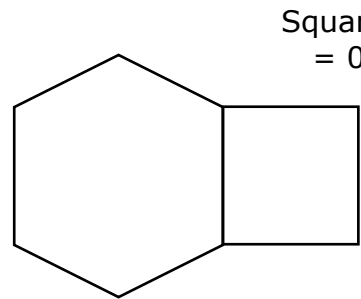


Semiperimeter = 75

23X-73= _____

23X-74.

REGULAR HEXAGON AND SQUARE



Square Area
= 0.782

Perimeter = ?

23X-74= _____

23X-75. $\frac{\text{Log}(35.8 + 13.8)}{22.9 - 81.6}$ ----- 75= _____

23X-76. $\frac{(22.6)^{0.876}(1.85)^{0.662}}{(2.77 - 2.37)^{-10}}$ ----- 76= _____

23X-77. $\frac{30700 - 14700}{\text{Log}(1340 + 1610)}$ ----- 77= _____

23X-78. $\frac{\text{Log}[4.81 \times 10^6 + (2580)(3760)]}{0.657 + \text{Log}[3.68 + 3.73]}$ ----- 78= _____

23X-79. $1 + 2 + 3 + \dots + 939$ ----- 79= _____

23X-80. $1 + 0.55 + (0.55)^2 + \frac{(0.55)^4}{8} - \frac{(0.55)^5}{15}$ ----- 80= _____

2022 – 2023 UIL MS Calculator Test A Answer Key

23X-1	= 550 = 5.50×10^2	23X-14	= 69800 = 6.98×10^4	23X-27	= -5.50×10^9
23X-2	= -47.0 = -4.70×10^1	23X-15	= -1.45×10^8	23X-28	= 4.25 = 4.25×10^0
23X-3	= 3500 = 3.50×10^3	23X-16	= 0.391 = 3.91×10^{-1}	23X-29	= 6.57×10^{-14}
23X-4	= -31.9 = -3.19×10^1	23X-17	= 1.21×10^6	23X-30	= -61.6 = -6.16×10^1
23X-5	= -118 = -1.18×10^2	23X-18	= 0.000179 = 1.79×10^{-4}	23X-31	= 2.25×10^{-10}
23X-6	= -763 = -7.63×10^2	23X-19	= 0.0712 = 7.12×10^{-2}	23X-32	= 2.13×10^{-8}
23X-7	= 0.631 = 6.31×10^{-1}	23X-20	= 0.0906 = 9.06×10^{-2}	23X-33	= -1.82 = -1.82×10^0
23X-8	= -1.60 = -1.60×10^0	23X-21	= 0.230 = 2.30×10^{-1}	23X-34	= 0.00215 = 2.15×10^{-3}
23X-9	= 1.62×10^7	23X-22	= -4.29×10^6	23X-35	= 2000 = 2.00×10^3
23X-10	= 2.18×10^{12}	23X-23	= 2.89×10^8	23X-36	= 72.00 Dollar Answer
23X-11	= -46500 = -4.65×10^4	23X-24	= 61.8 = 6.18×10^1	23X-37	= 0.0279 = 2.79×10^{-2}
23X-12	= 289 = 2.89×10^2	23X-25	= 29 Integer Answer	23X-38	= 0.00310 = 3.10×10^{-3}
23X-13	= 6.30 Dollar Answer	23X-26	= 103 = 1.03×10^2		

2022 – 2023 UIL MS Calculator Test A Answer Key

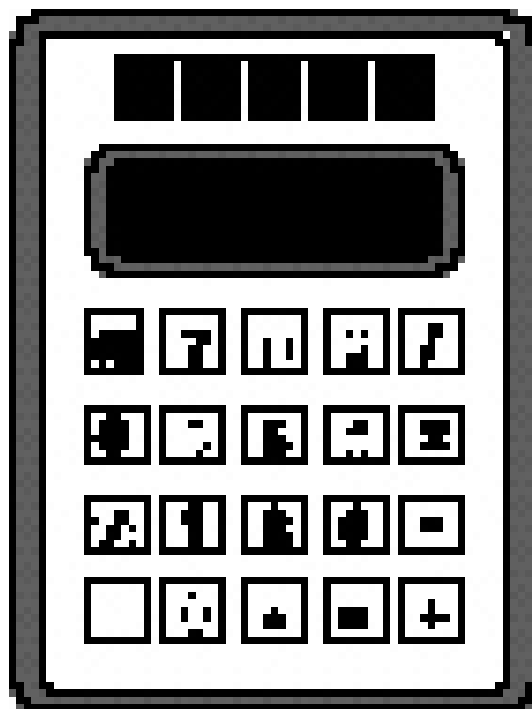
23X-39 = 7.87×10^6	23X-51 = 3590 = 3.59×10^3	23X-61 = 4.86×10^8	23X-73 = 35.1 = 3.51×10^1
23X-40 = 1.52×10^{19}	23X-52 = 2.76×10^{-7}	23X-62 = 8.92 = 8.92×10^0	23X-74 = 7.07 = 7.07×10^0
23X-41 = 7.29×10^7	23X-53 = -6.28 = -6.28×10^0	23X-63 = 0.975 = 9.75×10^{-1}	23X-75 = -0.0289 = -2.89×10^{-2}
23X-42 = 214000 = 2.14×10^5	23X-54 = 0.0671 = 6.71×10^{-2}	23X-64 = -11.6 = -1.16×10^1	23X-76 = 0.00242 = 2.42×10^{-3}
23X-43 = 6.62×10^{11}	23X-55 = 0.885 = 8.85×10^{-1}	23X-65 = 391 = 3.91×10^2	23X-77 = 4610 = 4.61×10^3
23X-44 = 0.473 = 4.73×10^{-1}	23X-56 = -141 = -1.41×10^2	23X-66 = 0.0707 = 7.07×10^{-2}	23X-78 = 4.69 = 4.69×10^0
23X-45 = 4160 = 4.16×10^3	23X-57 = 9.66 = 9.66×10^0	23X-67 = 23.6 = 2.36×10^1	23X-79 = 441000 = 4.41×10^5
23X-46 = 346000 = 3.46×10^5	23X-58 = 8.16 = 8.16×10^0	23X-68 = 0.0902 = 9.02×10^{-2}	23X-80 = 1.86 = 1.86×10^0
23X-47 = 79.4 = 7.94×10^1	23X-59 = 3440 = 3.44×10^3	23X-69 = -0.976 = -9.76×10^{-1}	
23X-48 = 4.87 = 4.87×10^0	23X-60 = 162 = 1.62×10^2	23X-70 = 67.5 = 6.75×10^1	
23X-49 = 6020 = 6.02×10^3		23X-71 = 8.98 Dollar Answer	
23X-50 = 5.06 = 5.06×10^0		23X-72 = 3.77 = 3.77×10^0	

FALL/WINTER DISTRICT 2022-2023

A+ ACADEMICS



University Interscholastic League



Calculator Applications

**DO NOT OPEN TEST
UNTIL TOLD TO DO SO**

2022 – 2023 UIL MS Calculator Test B

23Y-1. $5910 - 3870$ ----- 1= _____

23Y-2. $-53 - 49 + 10$ ----- 2= _____

23Y-3. $52.7 + 28.6 + 13.1$ ----- 3= _____

23Y-4. $18 - 18 - \pi - 16$ ----- 4= _____

23Y-5. $1250 - 1030 - 1060 + 592$ ----- 5= _____

23Y-6. $400 + 400 - 336 - 264 + 275$ ----- 6= _____

23Y-7. $3.94 + 6.23 + 6.42 + 1.97 + 1.29$ ----- 7= _____

23Y-8. $1.4 + 0.454 - 0.673 + 1.45 + 1.41$ ----- 8= _____

23Y-9. $180 \times 131 \times 359$ ----- 9= _____

23Y-10. $1150 \times 1920 \times 179 \times 4070$ ----- 10= _____

23Y-11. What is the result of adding pi and 4.81 and then multiplying that sum by -0.00506? ----- 11= _____

23Y-12. If I get reimbursed 59¢ per mile for traveling to a presentation workshop I give, how much am I reimbursed for traveling to a workshop that is a total of 739.7 miles? ----- 12=\$ _____

23Y-13. How much fuel do I use in driving 515 miles if my car can travel 23 miles per gallon of fuel? ----- 13= _____ gal

23Y-14. $(748)[490 \times 747/128]$ ----- 14= _____

23Y-15. $40/[37 \times 40 \times 132]$ ----- 15= _____

23Y-16. $\{(600)(407 - 317)(446)\} - 2.28 \times 10^7$ ----- 16= _____

23Y-17. $(110 + 62)[154 - 156 - 129]$ ----- 17= _____

23Y-18. $\frac{(294/368) + (400/400)}{(0.0242 - 0.0189)}$ ----- 18= _____

23Y-19. $\left[\frac{(0.0156 + 0.0102)}{137/141} \right] \left[\frac{13.2}{3.6} \right]$ ----- 19= _____

23Y-20. $\frac{(\pi)(11/6)(15/13)}{131}$ ----- 20= _____

23Y-21. $\frac{(0.00217)(400)}{0.011} (17.4 - 4.87)$ ----- 21= _____

23Y-22. $\frac{[-(1780 + 1350)(2030 - 968)]}{(169/(1.11 \times 10^5))}$ ----- 22= _____

23Y-23. $\frac{(\pi)(189/352)(543/314)}{(182/227)}$ ----- 23= _____

23Y-24. To help with the family expenses Mike works as a busboy at a local restaurant for 3 hours per night, Tuesday through Sunday. If he was paid \$5.75 per hour and earned on average \$22 per night in tips, what was his total weekly earnings? ----- 24=\$ _____

23Y-25. Lady and Max, our two dogs, each consume 2.25 pounds of dog food each day. How much dog food do they eat together during the months of September, October, and November? ----- 25= _____ Lbs.

23Y-26. Li and John are at opposite ends of the goal lines of a football field. At the same time, they start walking toward each other. If John walks at a steady rate of 5 feet/second and Li walks at a steady rate of 6 feet/second, what is the shortest time it takes them to reach each other, assuming they both walk in a straight line?----- 26= _____ s

23Y-27. $(6.42 \times 10^{-4}) [(0.548/0.506)(\pi/0.34)]$ ----- 27= _____

23Y-28. $\frac{(11 + 16.1)(0.0711 + 0.0356)}{(3.50 \times 10^{12})}$ ----- 28= _____

23Y-29. $[5880 - (6220 + 5090)] + [(29.2)(1780 - 1890)]$ ----- 29= _____

23Y-30. $\frac{1}{0.807} + \frac{1}{(0.48 - 0.173)}$ ----- 30= _____

23Y-31. $[0.00942] \left[\frac{1/9.24 \times 10^{-4}}{1/0.0052} \right]$ ----- 31= _____

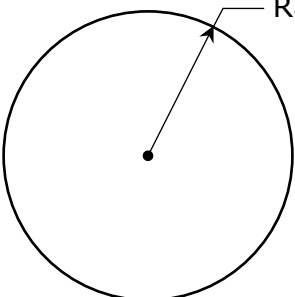
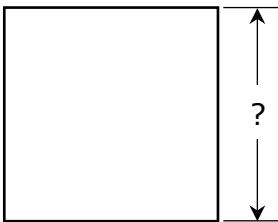
23Y-32. $\frac{1}{31.6} + \frac{1}{(\pi)(209 - 162)}$ ----- 32= _____

23Y-33. $\frac{1}{283} - \frac{1}{730} + \frac{1}{769}$ ----- 33= _____

23Y-34. $\left[\frac{1/542}{1/480} \right] + [0.597]$ ----- 34= _____

23Y-35. If a quarter is 1.75 millimeters thick, what is the greatest number of quarters that can be stacked one foot high? (Remember 1 inch = 2.54 centimeters)----- 35= _____ (integer)

23Y-36. The average daily amount of rainfall for the month of March in Houston is 3.86". If it rained 2.95" on March 10th, 4.76" on March 19th and 3.75" on March 25th, how much does it need to rain on the last day of March to reach that average daily rainfall amount for the month?----- 36= _____ in

<p>23Y-37. CIRCLE</p> <div style="text-align: center;">  <p style="margin-left: 100px;">Radius = 0.00384</p> <p style="margin-left: 100px;">Circumference = ?</p> </div> <p>23Y-37= _____</p>	<p>23Y-38. SQUARE</p> <div style="text-align: center;">  <p style="margin-left: 100px;">Perimeter = 8.29×10^{12}</p> </div> <p>23Y-38= _____</p>
---	--

23Y-39. $\left[\frac{71.8}{0.744}\right](54.5 + 82.3)^3$ ----- 39= _____

23Y-40. $\frac{(2970 + 4330)^2}{(0.251 - 0.126)^3}$ ----- 40= _____

23Y-41. $\left[\frac{45900 + (1/(1.80 \times 10^{-5}))}{(58900/48200) - 0.702}\right]^2$ ----- 41= _____

23Y-42. $(1/(0.0313))(6160 - 3450)^2$ ----- 42= _____

23Y-43. $\sqrt{8.17} + \sqrt{46 + 32.4} - (\pi)\sqrt{30.8}$ ----- 43= _____

23Y-44. $(1/\pi)\sqrt[4]{\frac{0.0186 + 0.0402}{0.146 - 0.142}}$ ----- 44= _____

23Y-45. $\frac{1}{\sqrt{91.3 + 74.4 + 112}} + \left(\frac{1}{\sqrt{2.44}}\right)^4$ ----- 45= _____

23Y-46. $(5370)\sqrt{8360 + 10600 - 7120}$ ----- 46= _____

23Y-47. Liz tied a 25' long rope to the top of an 18'6" tall wall. What is the maximum distance she can stretch the rope taut and touch the level ground near the wall with the rope? ----- 47= _____ ft

23Y-48. The hands of a watch measured 6.35 mm and 9.75 mm. At 9:00 o'clock, what is the distance between the tips of the hands?----- 48= _____ mm

23Y-49. RIGHT TRIANGLE

23Y-49= _____

23Y-50. ISOSCELES RIGHT TRIANGLE

23Y-50= _____

$$23Y-51. \quad \frac{(687 + 3910 - 4450)^2}{\sqrt{0.0709 + 0.0453 + 0.0752}} \text{ ----- } 51 = \underline{\hspace{2cm}}$$

$$23Y-52. \quad \sqrt{\frac{0.395}{(0.0281)(419)}} + \frac{(0.0179 - 0.00918)}{(0.011 + 0.00998)} \text{ ----- } 52 = \underline{\hspace{2cm}}$$

$$23Y-53. \quad \left[\frac{\sqrt{\sqrt{322 - 241}}}{-(1870 - 350)} \right]^3 [59000 + 27100] \text{ ----- } 53 = \underline{\hspace{2cm}}$$

$$23Y-54. \quad 7080 + \sqrt{(12800)(14300)} - (14300 + 13300) \text{ ----- } 54 = \underline{\hspace{2cm}}$$

$$23Y-55. \quad 0.942 + \sqrt{(343)/(60.2)} - (0.581 + 0.959)^2 \text{ ----- } 55 = \underline{\hspace{2cm}}$$

$$23Y-56. \quad \sqrt{\frac{(4.42 \times 10^5)(18600)}{(25400)(21000)}} - 0.41 + 1.89 \text{ ----- } 56 = \underline{\hspace{2cm}}$$

$$23Y-57. \quad \sqrt{\frac{(1420)(11.8)}{(451) + (325)}} + 1/(2.16)^{-2} \text{ ----- } 57 = \underline{\hspace{2cm}}$$

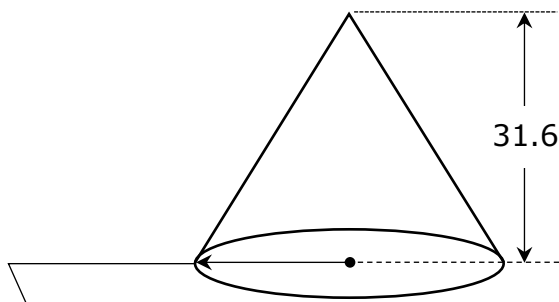
$$23Y-58. \quad \sqrt{\frac{(966)(2100)}{(7.37) + (12.9)}} - 400 \text{ ----- } 58 = \underline{\hspace{2cm}}$$

23Y-59. On a particular day, the money exchange rate for the Mexican Peso to the US Dollar was 20.4341 Pesos to 1 US Dollar, while the Norwegian Kroner (kr) to Mexican Peso rate was 2.01969 Mexican Pesos to 1 Norwegian Kroner. If Mrs. Silva converted \$1000 to Pesos and converted her Pesos in Oslo, Norway to Kroner, how many Kroner did she get to spend in Norway for Christmas gifts while on a cruise?----- 59=_____ kr

23Y-60. To calculate the distance a dropped object falls, in feet, you simply multiply one-half times the acceleration due to gravity times the length of time squared the object is in the air. So, if the acceleration due to gravity is 32.174 ft/sec² and the object falls 6 feet, how long did the object take to fall that distance?----- 60=_____ s

23Y-61.

RIGHT CIRCULAR CONE



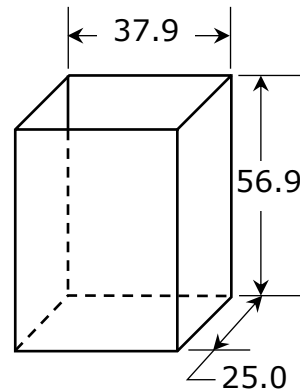
Radius = 18.3

Volume = ?

23Y-61= _____

23Y-62.

SOLID RECTANGULAR BOX



Total Surface Area = ?

23Y-62= _____

23Y-63. $\frac{23! - 22!}{6!}$ ----- 63= _____

23Y-64. (deg) $(1.87 + 0.27)\sin(107^\circ)$ ----- 64= _____

23Y-65. $(8.68 \times 10^7 - 5.81 \times 10^7)^4(9530)$ ----- 65= _____

23Y-66. (deg) $[107]\cos(111^\circ - 25.7^\circ)$ ----- 66= _____

23Y-67. (rad) $\cos\left[\frac{(2.47)(\pi)}{(30.8)(37.8)}\right]$ ----- 67= _____

23Y-68. (deg) $\frac{\tan(13.9^\circ)}{2760 + 3010}$ ----- 68= _____

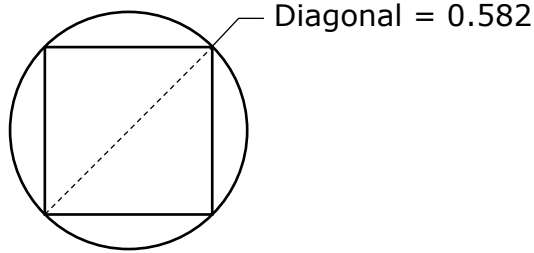
23Y-69. (rad) $(14.2)\cos(223)$ ----- 69= _____

23Y-70. $(37.8 - 21.8)e^{\pi - 0.372}$ ----- 70= _____

23Y-71. What is the percent increase for something that used to cost 25¢ but now costs 37¢? ----- 71= _____ %

23Y-72. If a number squared minus one and a half times that same number is 2.5, what is that number if it is negative? ----- 72= _____

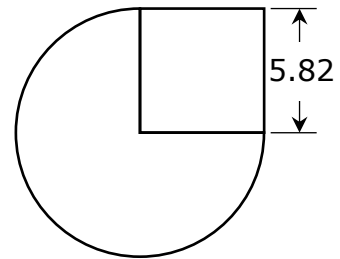
23Y-73.
CIRCUMSCRIBED SQUARE AND CIRCLE



$$\frac{\text{Square Area}}{\text{Circle Area}} = ?$$

23Y-73= _____

23Y-74.
THREE-QUARTERS CIRCLE AND SQUARE



$$\text{Total Area} = ?$$

23Y-74= _____

23Y-75. $\frac{\text{Log}(4.90 \times 10^{10} + 5.09 \times 10^{10})}{1.32}$ ----- 75= _____

23Y-76. $\frac{(0.241)^{0.648}(2.8)^{0.44}}{(0.576 - 0.386)^{-4}}$ ----- 76= _____

23Y-77. $(8350)_{10}^{(0.981)(5.22)}$ ----- 77= _____

23Y-78. $\frac{\text{Log}[491 + (46.6)(46.8)]}{0.872 + \text{Log}[6.31 + 5.17]}$ ----- 78= _____

23Y-79. $1 + 2 + 3 + \dots + 667$ ----- 79= _____

23Y-80. $1 + \frac{(0.54)^4}{2} - \frac{(0.54)^6}{6} + \frac{(0.54)^8}{24} - \frac{(0.54)^{10}}{120}$ ----- 80= _____

2022 – 2023 UIL MS Calculator Test B Answer Key

23Y-1	= 2040 = 2.04×10^3	23Y-14	= 2.14×10^6	23Y-27	= 0.00642 = 6.42×10^{-3}
23Y-2	= -92.0 = -9.20×10^1	23Y-15	= 0.000205 = 2.05×10^{-4}	23Y-28	= 8.26×10^{-13}
23Y-3	= 94.4 = 9.44×10^1	23Y-16	= 1.28×10^6	23Y-29	= -8640 = -8.64×10^3
23Y-4	= -19.1 = -1.91×10^1	23Y-17	= -22500 = -2.25×10^4	23Y-30	= 4.50 = 4.50×10^0
23Y-5	= -248 = -2.48×10^2	23Y-18	= 339 = 3.39×10^2	23Y-31	= 0.0530 = 5.30×10^{-2}
23Y-6	= 475 = 4.75×10^2	23Y-19	= 0.0974 = 9.74×10^{-2}	23Y-32	= 0.0384 = 3.84×10^{-2}
23Y-7	= 19.9 = 1.99×10^1	23Y-20	= 0.0507 = 5.07×10^{-2}	23Y-33	= 0.00346 = 3.46×10^{-3}
23Y-8	= 4.04 = 4.04×10^0	23Y-21	= 989 = 9.89×10^2	23Y-34	= 1.48 = 1.48×10^0
23Y-9	= 8.47×10^6	23Y-22	= -2.18×10^9	23Y-35	= 174 Integer Answer
23Y-10	= 1.61×10^{12}	23Y-23	= 3.64 = 3.64×10^0	23Y-36	= 3.98 = 3.98×10^0
23Y-11	= -0.0402 = -4.02×10^{-2}	23Y-24	= 235.50 Dollar Answer	23Y-37	= 0.0241 = 2.41×10^{-2}
23Y-12	= 436.42 Dollar Answer	23Y-25	= 410 = 4.10×10^2	23Y-38	= 2.07×10^{12}
23Y-13	= 22.4 = 2.24×10^1	23Y-26	= 27.3 = 2.73×10^1		

2022 – 2023 UIL MS Calculator Test B Answer Key

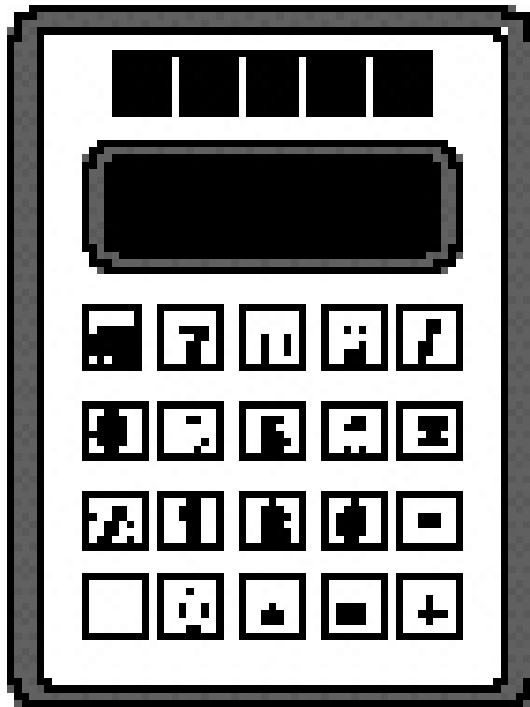
23Y-39 = 2.47×10^8	23Y-51 = 49400 = 4.94×10^4	23Y-61 = 11100 = 1.11×10^4	23Y-73 = 0.637 = 6.37×10^{-1}
23Y-40 = 2.73×10^{10}	23Y-52 = 0.599 = 5.99×10^{-1}	23Y-62 = 9050 = 9.05×10^3	23Y-74 = 114 = 1.14×10^2
23Y-41 = 3.81×10^{10}	23Y-53 = -0.000662 = -6.62×10^{-4}	23Y-63 = 3.43×10^{19}	23Y-75 = 8.33 = 8.33×10^0
23Y-42 = 2.35×10^8	23Y-54 = -6990 = -6.99×10^3	23Y-64 = 2.05 = 2.05×10^0	23Y-76 = 0.000815 = 8.15×10^{-4}
23Y-43 = -5.72 = -5.72×10^0	23Y-55 = 0.957 = 9.57×10^{-1}	23Y-65 = 6.47×10^{33}	23Y-77 = 1.10×10^9
23Y-44 = 0.623 = 6.23×10^{-1}	23Y-56 = 5.41 = 5.41×10^0	23Y-66 = 8.77 = 8.77×10^0	23Y-78 = 1.77 = 1.77×10^0
23Y-45 = 0.228 = 2.28×10^{-1}	23Y-57 = 9.31 = 9.31×10^0	23Y-67 = 1.00 = 1.00×10^0	23Y-79 = 223000 = 2.23×10^5
23Y-46 = 584000 = 5.84×10^5	23Y-58 = -83.6 = -8.36×10^1	23Y-68 = 4.29×10^{-5}	23Y-80 = 1.04 = 1.04×10^0
23Y-47 = 16.8 = 1.68×10^1	23Y-59 = 10100 = 1.01×10^4	23Y-69 = -14.2 = -1.42×10^1	
23Y-48 = 11.6 = 1.16×10^1	23Y-60 = 0.611 = 6.11×10^{-1}	23Y-70 = 255 = 2.55×10^2	
23Y-49 = 0.485 = 4.85×10^{-1}		23Y-71 = 48.0 = 4.80×10^1	
23Y-50 = 662000 = 6.62×10^5		23Y-72 = -1.00 = -1.00×10^0	

SPRING DISTRICT 2022-2023

A+ ACADEMICS



University Interscholastic League



Calculator Applications

**DO NOT OPEN TEST
UNTIL TOLD TO DO SO**

How to Write the Answers

A. For all problems except stated problems as noted below—write three significant digits.

1. Examples (* means correct but not recommended)

Correct: 12.3, 123, 123.*, 1.23x10*, 1.23x10^{0*}
1.23x10¹, 1.23x10⁰¹, .0190, 0.0190, 1.90x10⁻²

Incorrect: 12.30, 123.0, 1.23(10)², 1.23·10², 1.230x10²,
1.23*10², 0.19, 1.9x10⁻², 19.0x10⁻³, 1.90E-02,

answers written in parentheses(), brackets[] or braces{} are incorrect

2. Plus or minus one digit error in the third significant digit is permitted.

B. For stated problems

1. Except for integer and dollar sign problems, answers to stated problems should be written with three significant digits.

2. Integer problems are indicated by (integer) in the answer blank. Integer problems answers must be exact, no plus or minus one digit, no decimal point or scientific notation.

3. Dollar sign (\$) problems should be answered to the exact cent, but plus or minus one cent error is permitted. Answers must be in fixed notation. The decimal point and cents are required for exact-dollar answers.

2022 – 2023 UIL MS Calculator Test C

23Z-1. $719 - 1760$ ----- 1= _____

23Z-2. $23 + 59 - 38$ ----- 2= _____

23Z-3. $158 + 105 - 159$ ----- 3= _____

23Z-4. $21 - \pi + 23 - 17$ ----- 4= _____

23Z-5. $6460 + 3540 - 4750 - 3510$ ----- 5= _____

23Z-6. $-274 - 226 - 347 + 260 + 134$ ----- 6= _____

23Z-7. $(0.466 - 0.931) + (0.625 - 1.64 - \pi)$ ----- 7= _____

23Z-8. $0.846 - 2.42 + 1.48 - 1.72 - 0.737$ ----- 8= _____

23Z-9. $77.3 \times 301 \times 258$ ----- 9= _____

23Z-10. $133 \times 109 \times 735 \times 764$ ----- 10= _____

23Z-11. What is the result of adding pi and -2.3 and then multiplying that sum by -7190?----- 11= _____

23Z-12. The cost to launch an object on the Space X Falcon Heavy rocket to low earth orbit is \$1400 per kilogram. What is the cost of launching a 5U CubeSat that has a mass of 6.65 kilograms? ----- 12=\$ _____

23Z-13. How much fuel do I buy with \$50 if the cost of fuel is \$4.089 per gallon of fuel ?----- 13= _____ gal

23Z-14. $(39)[95 \times 85/142]$ ----- 14= _____

23Z-15. $-206/[297 \times 75 \times 201]$ ----- 15= _____

23Z-16. $\{198/367\} \left[\frac{98}{272 + 381} \right]$ ----- 16= _____

23Z-17. $\left[\frac{279}{200} \right] [(69/344) + 0.0869]$ ----- 17= _____

23Z-18. $\left[\frac{(4630/1590) - (2740/2260)}{61.9/46.3} \right]$ ----- 18= _____

23Z-19. $\frac{(258/173) + (455/560)}{(0.103 - 0.306)}$ ----- 19= _____

23Z-20. $\frac{(\pi)(13/37)(8/30)}{423}$ ----- 20= _____

23Z-21. $(0.211)[86/122 \times 107/33] - 0.432$ ----- 21= _____

23Z-22. $\frac{(\pi)(237/386)(309/308)}{(221/432)}$ ----- 22= _____

23Z-23. $\left[\frac{2480 + 1560}{3280 - 2200} \right] \left[\frac{2490}{1630} \right]$ ----- 23= _____

23Z-24. To earn money for upcoming college expenses, Morgan works as a waitress at a local restaurant for 4 hours per night, Tuesday through Sunday. If she was paid \$4.15 per hour and earned on average \$33 per night in tips, what was her total weekly earnings?----- 24=\$ _____

23Z-25. Fazy, Goldie, and Patches, our three cats, each consume 0.75 pounds of cat food each day. How much cat food do they eat all together during the months of June, July, and August? ----- 25= _____ Lbs.

23Z-26. Naomi and Lupe are at opposite ends of a football field at the goal lines. At the same time, they start walking toward each other in a straight line along the same sideline. If Lupe walks at a steady rate of 4 feet/second and Naomi walks at a steady rate of 3 feet/second, what is the shortest time it takes them to reach each other? ----- 26= _____ s

23Z-27. $[615 - (384 + 700)] + [(-0.725)(1090 - 667)]$ ----- 27= _____

23Z-28. $\frac{(1.17 + 0.359)(3.78 + 4.49)}{(1.24 \times 10^{11})}$ ----- 28= _____

23Z-29. $(0.0173)[(11.5/7.23)(0.108 + 0.0998)]$ ----- 29= _____

23Z-30. $\frac{1}{-269} + \frac{1}{(3130 - 3220)}$ ----- 30= _____

23Z-31. $\frac{(5.66 + 40.2)}{(5.10 \times 10^{11})}$ ----- 31= _____

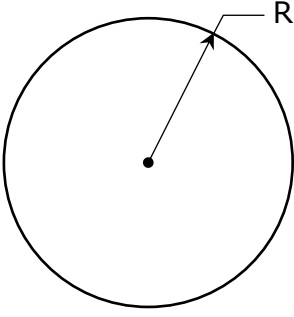
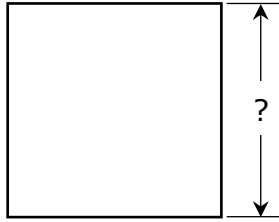
23Z-32. $[5.55]^{\left[\frac{1/76.5}{1/44.8}\right]}$ ----- 32= _____

23Z-33. $\left[\frac{1/171}{1/142}\right] + [0.35]$ ----- 33= _____

23Z-34. $\left[\frac{1/69.5}{1/28.6}\right][1.00 \times 10^5]$ ----- 34= _____

23Z-35. If a quarter is 24.26 millimeters wide, what is the least number of quarters that can be laid side by side in a line to reach a length of one yard? (Remember 1 inch = 2.54 centimeters) ----- 35= _____ (integer)

23Z-36. The average daily amount of rainfall for the month of April in Dallas is 0.43". If it rained 2.05" on April 10th, 2.88" on April 19th and 4.02" on April 25th, how much does it need to rain on the last day of April to reach that average daily rainfall amount for the month? ----- 36= _____ in

<p>23Z-37.</p> <p style="text-align: center;">CIRCLE</p>  <p style="text-align: center;">Circumference = ?</p> <p>23Z-37= _____</p>	<p>23Z-38.</p> <p style="text-align: center;">SQUARE</p>  <p style="text-align: center;">Area = 4.72×10^{13}</p> <p>23Z-38= _____</p>
--	--

23Z-39. $\left[\frac{27900 + (1/(5.74 \times 10^{-5}))}{(31700/40900) - 0.624} \right]^2$ ----- 39= _____

23Z-40. $(184 + 117)^2(9.28 + 35.1)^2$ ----- 40= _____

23Z-41. $\sqrt{\frac{480 + 117}{0.29 - 0.225}}$ ----- 41= _____

23Z-42. $\sqrt{168 - 79 + 109} - \sqrt{110}$ ----- 42= _____

23Z-43. $\sqrt{215} + \sqrt{308 + 262} - (\pi)\sqrt{43.2}$ ----- 43= _____

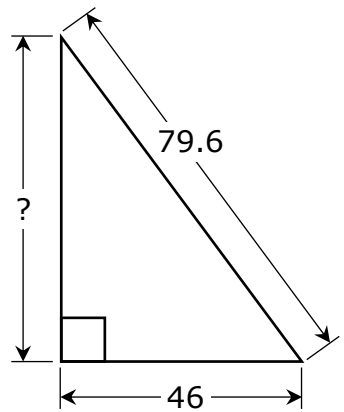
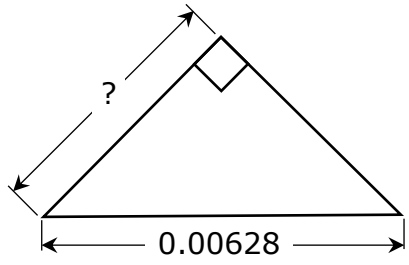
23Z-44. $(1/\pi)\sqrt[3]{\frac{0.0368 + 0.021}{0.264 - 0.0945}}$ ----- 44= _____

23Z-45. $[\sqrt{(2100/890)(17.1)}]^4$ ----- 45= _____

23Z-46. $\sqrt[4]{16.4 - 545/224} + 1/\sqrt{6.97 \times 10^{-6} + 8.37 \times 10^{-6}}$ ----- 46= _____

23Z-47. Albert tied a 20' long rope to the top of an 18'9" tall wall. What is the maximum distance he can stretch the rope taut and touch the level ground near the wall with the rope? ----- 47= _____ ft

23Z-48. The hands of a clock measured 24.3 cm and 16.5 cm. At 3:00 o'clock, what is the distance between the tips of the hands? ----- 48= _____ cm

<p>23Z-49. RIGHT TRIANGLE</p>  <p>23Z-49= _____</p>	<p>23Z-50. ISOSCELES RIGHT TRIANGLE</p>  <p>23Z-50= _____</p>
---	--

$$23Z-51. \left[\frac{70.1 + 30.1 + \sqrt{7970 + 1760}}{252/291} \right]^4 \text{ ----- } 51 = \underline{\hspace{2cm}}$$

$$23Z-52. \frac{\sqrt{7.74 + \pi + 1.58}}{(24.1 - 80.7 + 67.4)^2} \text{ ----- } 52 = \underline{\hspace{2cm}}$$

$$23Z-53. \left[\frac{2920 - 2430 + \sqrt{2.28 \times 10^8 / 1230}}{-4380 + 6540} \right]^5 \text{ ----- } 53 = \underline{\hspace{2cm}}$$

$$23Z-54. \sqrt{\frac{(6.03 \times 10^5)(24000)}{(56900)(63100)}} - 1.43 + 1.88 \text{ ----- } 54 = \underline{\hspace{2cm}}$$

$$23Z-55. (1630)(4.36 \times 10^7)^{1/2} - [(6.46 \times 10^{13})(3.72 \times 10^{14})]^{1/4} \text{ --- } 55 = \underline{\hspace{2cm}}$$

$$23Z-56. 34500 + \sqrt{(37200)(34200)} - (41100 + 6790) \text{ ----- } 56 = \underline{\hspace{2cm}}$$

$$23Z-57. \sqrt{\frac{1/(101 - 33.7)}{(205)(18.6 + 39.5)^{-5}}} \text{ ----- } 57 = \underline{\hspace{2cm}}$$

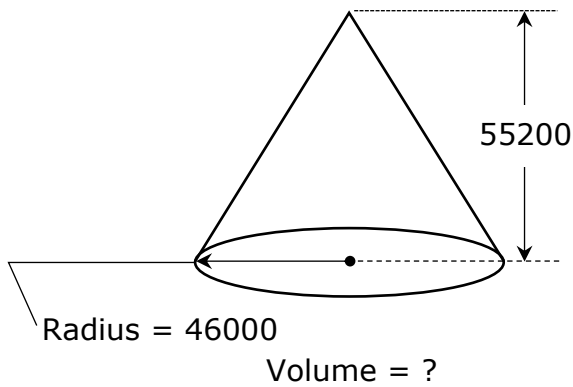
$$23Z-58. \sqrt{\frac{(22.8)(63.8)}{(13.3) + (22.4)}} + 1/(0.156)^1 \text{ ----- } 58 = \underline{\hspace{2cm}}$$

23Z-59. On a particular day the money exchange rate for the Mexican Peso to the US Dollar was 20.4344 Pesos to 1 US Dollar, while the Australian Dollar (AUD) to Mexican Peso rate was 14.0515 Mexican Pesos to 1 Australian Dollar. If Mrs. Pena converted \$250 to Pesos and converted her Pesos in Sidney, Australia to Australian Dollars, how many Australian Dollars did she get to spend in Sidney for birthday gifts?----- 59= _____ AUD

23Z-60. To calculate the distance a dropped object falls, in feet, you simply multiply one-half times the acceleration due to gravity times the length of time squared the object is in the air. So, if the acceleration due to gravity is 32.174 ft/sec² and the object falls 4 feet, how long did the object take to fall that distance? ----- 60= _____ s

23Z-61.

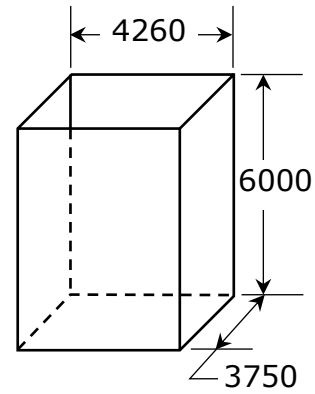
RIGHT CIRCULAR CONE



23Z-61= _____

23Z-62.

SOLID RECTANGULAR BOX



23Z-62= _____

23Z-63. $\frac{20!}{25!}$ ----- 63= _____

23Z-64. (deg) $(173 - 147)\cos(290^\circ)$ ----- 64= _____

23Z-65. $(1.66 \times 10^5 - 87100)^{-5}(8.00 \times 10^5)$ ----- 65= _____

23Z-66. (rad) $\frac{\tan(177)}{2460/3300}$ ----- 66= _____

23Z-67. (deg) $[17.3]\tan(112^\circ - 116^\circ)$ ----- 67= _____

23Z-68. (rad) $\tan[(3 - 2.29)(15.2)]$ ----- 68= _____

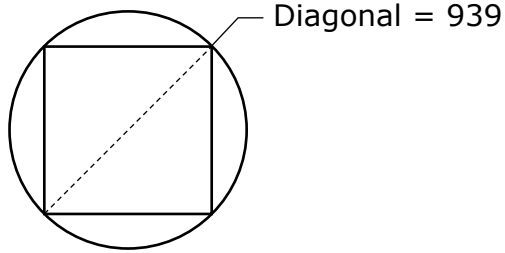
23Z-69. (deg) $\frac{\sin(486^\circ)}{\tan(486^\circ)}[5.68]$ ----- 69= _____

23Z-70. $(723 - 666)e^{\pi - 0.473}$ ----- 70= _____

23Z-71. What is the percent decrease for a population, if at one time the population was 1390 and 10 years later the population was 979?-- 71= _____ %

23Z-72. If a number squared minus two and a half times that same number is 5.3, what is that number if it is positive? ----- 72= _____

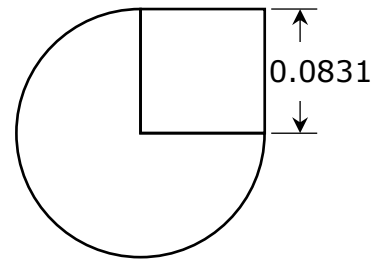
23Z-73.
CIRCUMSCRIBED SQUARE AND CIRCLE



$$\frac{\text{Circle Area}}{\text{Square Area}} = ?$$

23Z-73= _____

23Z-74.
THREE-QUARTERS CIRCLE AND SQUARE



$$\text{Total Area} = ?$$

23Z-74= _____

23Z-75. $\frac{0.154 + \sqrt{(0.0983)(0.201) + (0.15)(0.509)}}{\sqrt{\sqrt{\pi} + 0.397}}$ ----- 75= _____

23Z-76. $\ln\left[\frac{69.8 + 69.5 + 36.4}{735 + 396 - 162}\right]$ ----- 76= _____

23Z-77. $(26800)_{10}^{(0.631)(\pi)}$ ----- 77= _____

23Z-78. $\frac{\text{Log}[578 + (135)(5.26)]}{2.77 + \text{Log}[7770 + 8060]}$ ----- 78= _____

23Z-79. $1 + 3 + 5 + \dots + 515$ ----- 79= _____

23Z-80. $(0.27) - \frac{(0.27)^2}{2} + \frac{(0.27)^3}{3} - \frac{(0.27)^4}{4}$ ----- 80= _____

2022 – 2023 UIL MS Calculator Test C Answer Key

$$\begin{aligned} 23Z-1 &= -1040 \\ &= -1.04 \times 10^3 \end{aligned}$$

$$\begin{aligned} 23Z-2 &= 44.0 \\ &= 4.40 \times 10^1 \end{aligned}$$

$$\begin{aligned} 23Z-3 &= 104 \\ &= 1.04 \times 10^2 \end{aligned}$$

$$\begin{aligned} 23Z-4 &= 23.9 \\ &= 2.39 \times 10^1 \end{aligned}$$

$$\begin{aligned} 23Z-5 &= 1740 \\ &= 1.74 \times 10^3 \end{aligned}$$

$$\begin{aligned} 23Z-6 &= -453 \\ &= -4.53 \times 10^2 \end{aligned}$$

$$\begin{aligned} 23Z-7 &= -4.62 \\ &= -4.62 \times 10^0 \end{aligned}$$

$$\begin{aligned} 23Z-8 &= -2.55 \\ &= -2.55 \times 10^0 \end{aligned}$$

$$23Z-9 = 6.00 \times 10^6$$

$$23Z-10 = 8.14 \times 10^9$$

$$\begin{aligned} 23Z-11 &= -6050 \\ &= -6.05 \times 10^3 \end{aligned}$$

$$\begin{aligned} 23Z-12 &= 9310.00 \\ &\text{Dollar Answer} \end{aligned}$$

$$\begin{aligned} 23Z-13 &= 12.2 \\ &= 1.22 \times 10^1 \end{aligned}$$

$$\begin{aligned} 23Z-14 &= 2220 \\ &= 2.22 \times 10^3 \end{aligned}$$

$$23Z-15 = -4.60 \times 10^{-5}$$

$$\begin{aligned} 23Z-16 &= 0.0810 \\ &= 8.10 \times 10^{-2} \end{aligned}$$

$$\begin{aligned} 23Z-17 &= 0.401 \\ &= 4.01 \times 10^{-1} \end{aligned}$$

$$\begin{aligned} 23Z-18 &= 1.27 \\ &= 1.27 \times 10^0 \end{aligned}$$

$$\begin{aligned} 23Z-19 &= -11.3 \\ &= -1.13 \times 10^1 \end{aligned}$$

$$\begin{aligned} 23Z-20 &= 0.000696 \\ &= 6.96 \times 10^{-4} \end{aligned}$$

$$\begin{aligned} 23Z-21 &= 0.0503 \\ &= 5.03 \times 10^{-2} \end{aligned}$$

$$\begin{aligned} 23Z-22 &= 3.78 \\ &= 3.78 \times 10^0 \end{aligned}$$

$$\begin{aligned} 23Z-23 &= 5.71 \\ &= 5.71 \times 10^0 \end{aligned}$$

$$\begin{aligned} 23Z-24 &= 297.60 \\ &\text{Dollar Answer} \end{aligned}$$

$$\begin{aligned} 23Z-25 &= 207 \\ &= 2.07 \times 10^2 \end{aligned}$$

$$\begin{aligned} 23Z-26 &= 42.9 \\ &= 4.29 \times 10^1 \end{aligned}$$

$$\begin{aligned} 23Z-27 &= -776 \\ &= -7.76 \times 10^2 \end{aligned}$$

$$23Z-28 = 1.02 \times 10^{-10}$$

$$\begin{aligned} 23Z-29 &= 0.00572 \\ &= 5.72 \times 10^{-3} \end{aligned}$$

$$\begin{aligned} 23Z-30 &= -0.0148 \\ &= -1.48 \times 10^{-2} \end{aligned}$$

$$23Z-31 = 8.99 \times 10^{-11}$$

$$\begin{aligned} 23Z-32 &= 3.25 \\ &= 3.25 \times 10^0 \end{aligned}$$

$$\begin{aligned} 23Z-33 &= 1.18 \\ &= 1.18 \times 10^0 \end{aligned}$$

$$\begin{aligned} 23Z-34 &= 41200 \\ &= 4.12 \times 10^4 \end{aligned}$$

$$\begin{aligned} 23Z-35 &= 38 \\ &\text{Integer Answer} \end{aligned}$$

$$\begin{aligned} 23Z-36 &= 4.09 \\ &= 4.09 \times 10^0 \end{aligned}$$

$$23Z-37 = 4.35 \times 10^6$$

$$23Z-38 = 6.87 \times 10^6$$

2022 – 2023 UIL MS Calculator Test C Answer Key

$$23Z-39 = 9.00 \times 10^{10}$$

$$23Z-40 = 1.78 \times 10^8$$

$$23Z-41 = 95.8$$
$$= 9.58 \times 10^1$$

$$23Z-42 = 3.58$$
$$= 3.58 \times 10^0$$

$$23Z-43 = 17.9$$
$$= 1.79 \times 10^1$$

$$23Z-44 = 0.222$$
$$= 2.22 \times 10^{-1}$$

$$23Z-45 = 1630$$
$$= 1.63 \times 10^3$$

$$23Z-46 = 257$$
$$= 2.57 \times 10^2$$

$$23Z-47 = 6.96$$
$$= 6.96 \times 10^0$$

$$23Z-48 = 29.4$$
$$= 2.94 \times 10^1$$

$$23Z-49 = 65.0$$
$$= 6.50 \times 10^1$$

$$23Z-50 = 0.00444$$
$$= 4.44 \times 10^{-3}$$

$$23Z-51 = 2.78 \times 10^9$$

$$23Z-52 = 0.0303$$
$$= 3.03 \times 10^{-2}$$

$$23Z-53 = 0.0141$$
$$= 1.41 \times 10^{-2}$$

$$23Z-54 = 2.46$$
$$= 2.46 \times 10^0$$

$$23Z-55 = -1.69 \times 10^6$$

$$23Z-56 = 22300$$
$$= 2.23 \times 10^4$$

$$23Z-57 = 219$$
$$= 2.19 \times 10^2$$

$$23Z-58 = 12.8$$
$$= 1.28 \times 10^1$$

$$23Z-59 = 364$$
$$= 3.64 \times 10^2$$

$$23Z-60 = 0.499$$
$$= 4.99 \times 10^{-1}$$

$$23Z-61 = 1.22 \times 10^{14}$$

$$23Z-62 = 9.59 \times 10^{10}$$

$$23Z-63 = 1.57 \times 10^{-7}$$

$$23Z-64 = 8.89$$
$$= 8.89 \times 10^0$$

$$23Z-65 = 2.62 \times 10^{-19}$$

$$23Z-66 = 2.46$$
$$= 2.46 \times 10^0$$

$$23Z-67 = -1.21$$
$$= -1.21 \times 10^0$$

$$23Z-68 = 4.84$$
$$= 4.84 \times 10^0$$

$$23Z-69 = -3.34$$
$$= -3.34 \times 10^0$$

$$23Z-70 = 822$$
$$= 8.22 \times 10^2$$

$$23Z-71 = 29.6$$
$$= 2.96 \times 10^1$$

$$23Z-72 = 3.87$$
$$= 3.87 \times 10^0$$

$$23Z-73 = 1.57$$
$$= 1.57 \times 10^0$$

$$23Z-74 = 0.0232$$
$$= 2.32 \times 10^{-2}$$

$$23Z-75 = 0.270$$
$$= 2.70 \times 10^{-1}$$

$$23Z-76 = -1.71$$
$$= -1.71 \times 10^0$$

$$23Z-77 = 2.57 \times 10^6$$

$$23Z-78 = 0.446$$
$$= 4.46 \times 10^{-1}$$

$$23Z-79 = 66600$$
$$= 6.66 \times 10^4$$

$$23Z-80 = 0.239$$
$$= 2.39 \times 10^{-1}$$

CONTESTANT NUMBER:

FOR GRADER USE ONLY

Test/Tiebreaker (#correct)

____ / ____ Initials ____

____ / ____ Initials ____

Papers contending to place:

____ / ____ Initials ____



**University Interscholastic League
A+ Chess Puzzle Contest • Answer Sheet**

Write your contestant number in the upper right corner, and circle your grade below.

Circle Grade Level: 2 3 4 5 6 7 8

Test (*circle only one answer for each question*)

1. a b c d

2. a b c d

3. a b c d

4. a b c d

5. a b c d

6. a b c d

7. a b c d

8. a b c d

9. a b c d

10. a b c d

11. a b c d

12. a b c d

13. a b c d

14. a b c d

15. a b c d

16. a b c d

17. a b c d

18. a b c d

19. a b c d

20. a b c d

*Questions
#17- 20
only for
Grades 4-8*

Tiebreaker (*circle only one answer for each question*)

1. a b c d

2. a b c d

3. a b c d

4. a b c d

5. a b c d

6. a b c d

7. a b c d

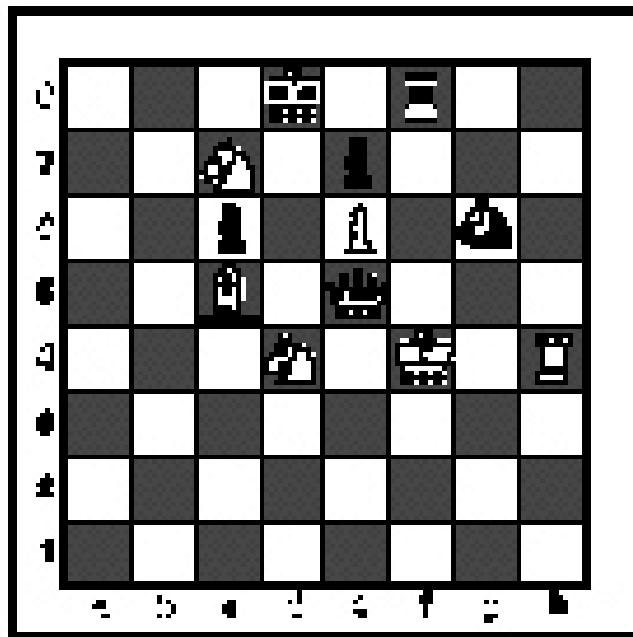
8. a b c d

INVITATIONAL 2022-2023

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University Interscholastic League



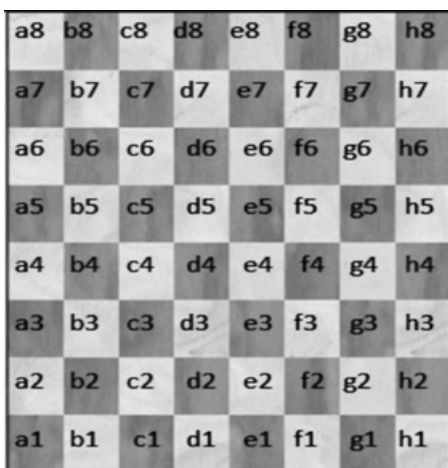
Chess Puzzle Solving

grades 6, 7, 8

**DO NOT OPEN TEST
UNTIL TOLD TO DO SO**

How to read and answer questions on this test

- To answer the questions on this test, you'll need to know how to read chess moves. It's simple to do.
- Every square on the board has an "address" made up of a letter and a number.

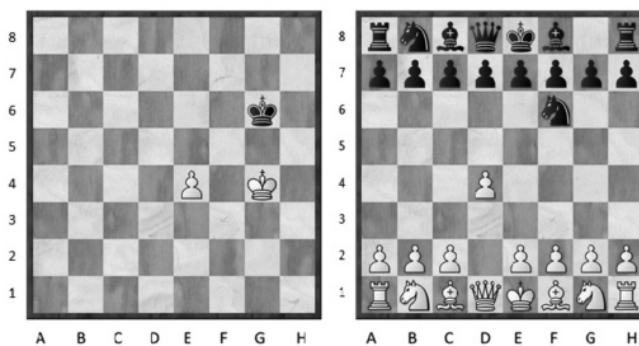


Piece Names	Each chessman can also be represented by a symbol, except for the pawn. (Figurine Notation)
King	
Queen	
Rook	
Bishop	
Knight	
Pawn	a-h (We write the file it's on.)

- To make them easy to read, the questions on this test use the figurine piece symbols on the right, above.
- When answering the puzzle questions, remember that white pawns move "up" the diagrams. Black pawns move "down" the diagrams.

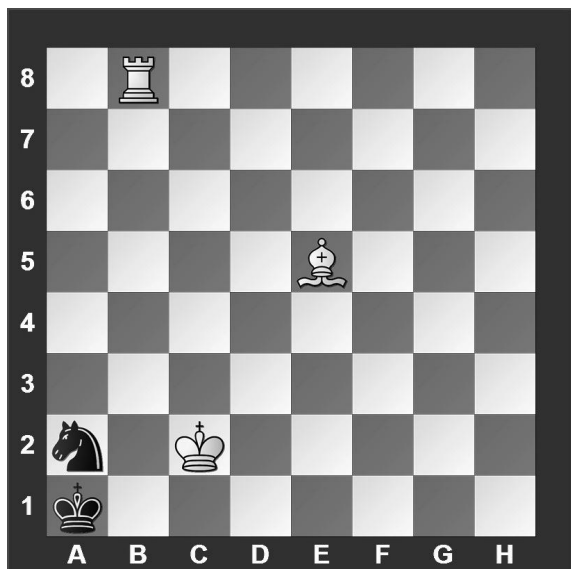
At right are two sample moves.

If you look closely at the diagrams in the questions below, you'll see that the frame around the diagram labels the ranks (1-8) and files (a-h) to help you.



White has just played **e4**. Black has just played ... **Nf6**.

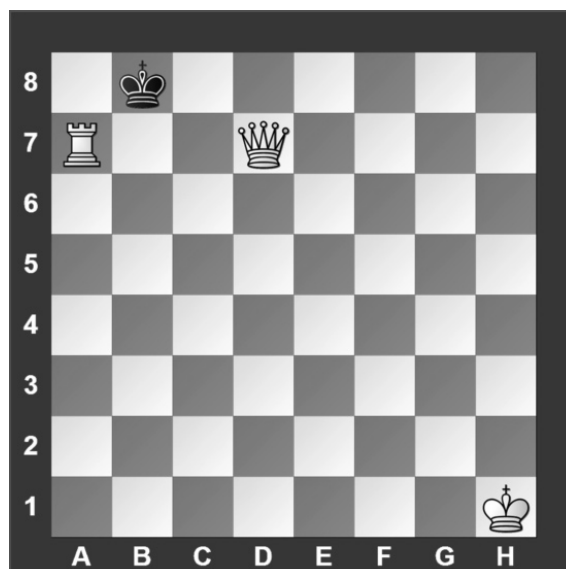
#1. Black to move



What term best describes this situation?

- a) Black is in checkmate.
- b) Black is in stalemate.
- c) Black is in check.
- d) None of the above.

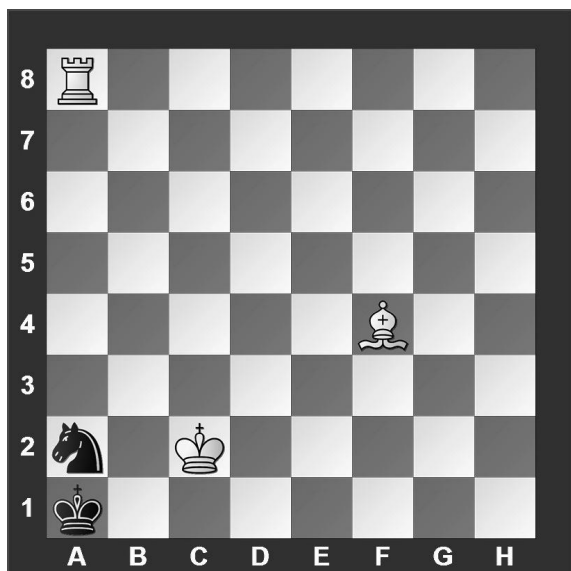
#2. Black to move



What term best describes this situation?

- a) Black is in checkmate.
- b) Black is in stalemate.
- c) Black is in check.
- d) None of the above.

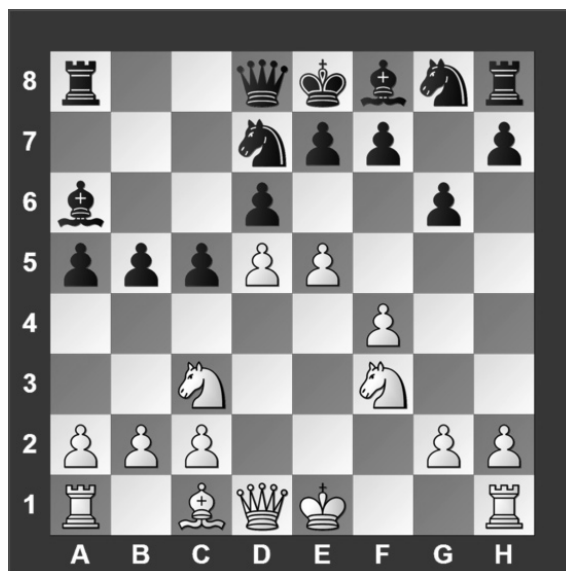
#3. Black to move



What term best describes this situation?

- a) Black is in checkmate.
- b) Black is in stalemate.
- c) Black is in check.
- d) None of the above.

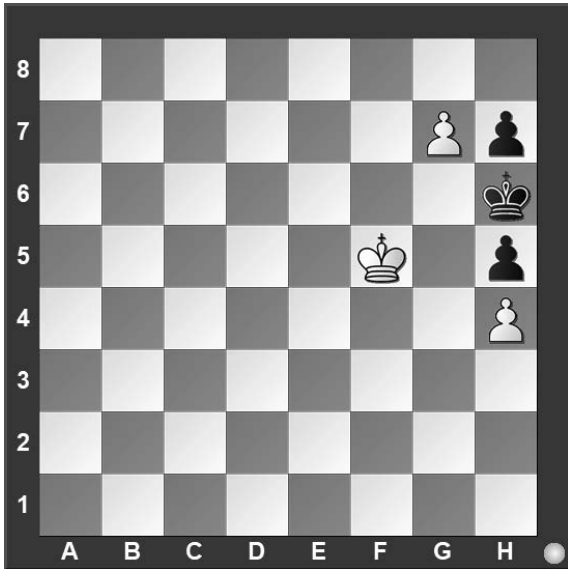
#4.



Black just played c7 to c5. Which pawn can be captured?

- a) Black's b-pawn
- b) Black's d-pawn
- c) Black's c-pawn
- d) All of the above

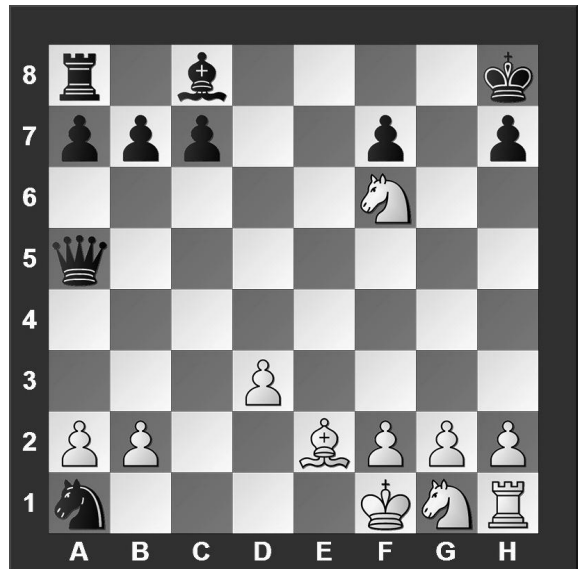
#5. White to move



What piece should White promote to?

- a) Queen
- b) Rook
- c) Bishop
- d) Knight

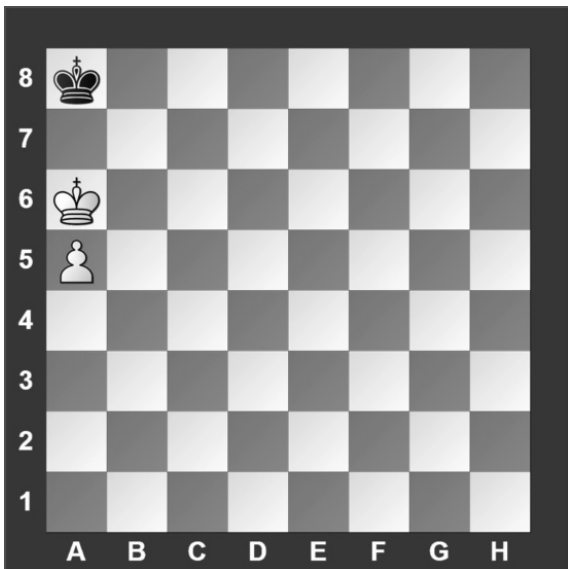
#6.



Which side has material advantage?

- a) White
- b) Black
- c) It's even.
- d) It's not possible to tell without knowing who is to move.

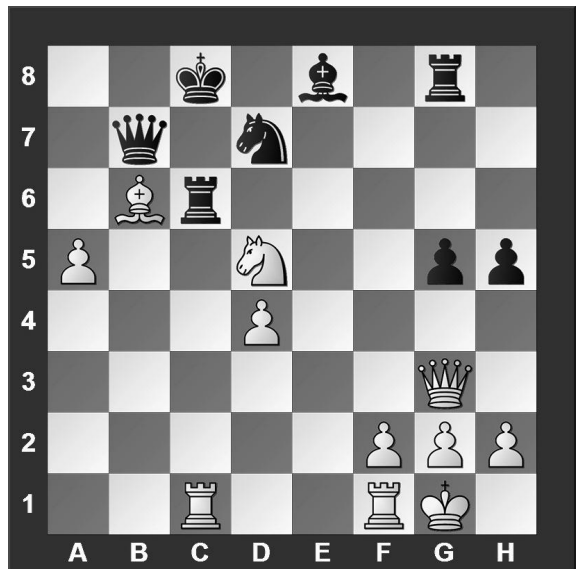
#7. White to move



What is the outcome of the game?

- a) White wins
- b) Black wins
- c) Draw
- d) Impossible to tell

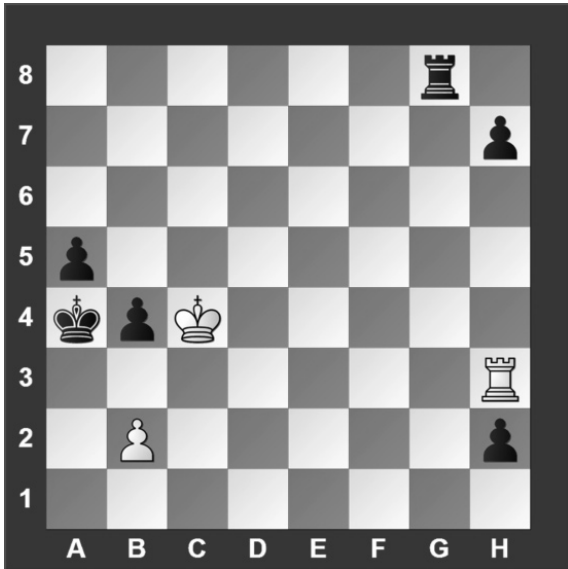
#8. White to move



What is White's best move?

- a) ♔c7
- b) ♖xc6
- c) ♞e7
- d) ♕b8

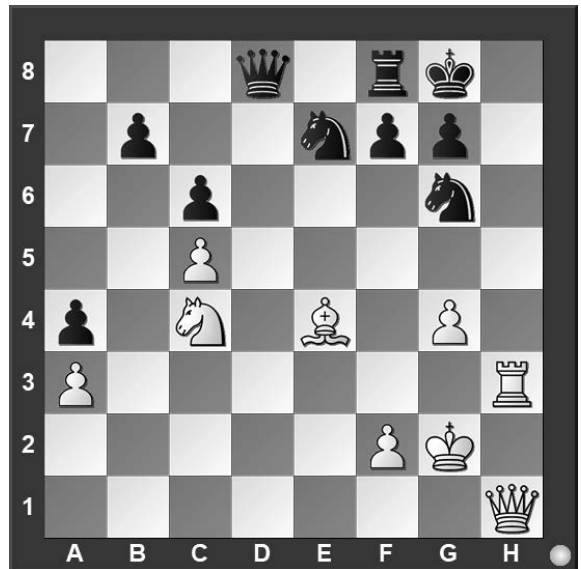
#9. White to move



White can checkmate Black in two moves, what's the *first* move?

- a) b3
- b) ♖×h7
- c) ♖a3
- d) ♖×h2

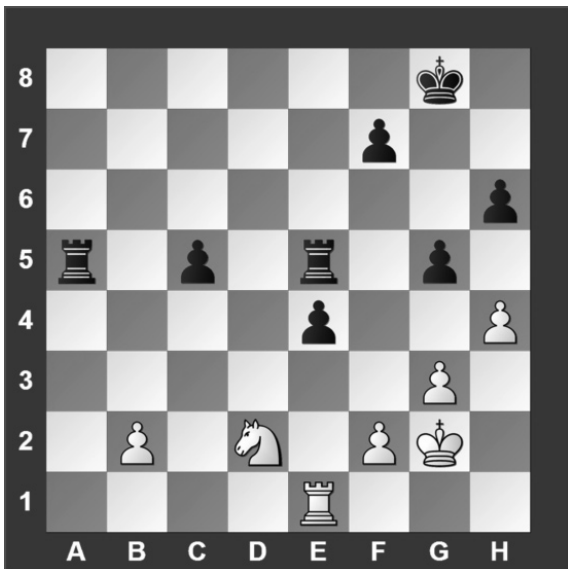
#10. White to move



If White can checkmate Black in two moves, what is the first move?

- a) ♖h8
- b) ♖d3
- c) ♗×g6
- d) ♘e5

#11. White to move



What is White's best move?

- a) ♘×e4
- b) ♘c4
- c) ♖×e4
- d) ♘b3

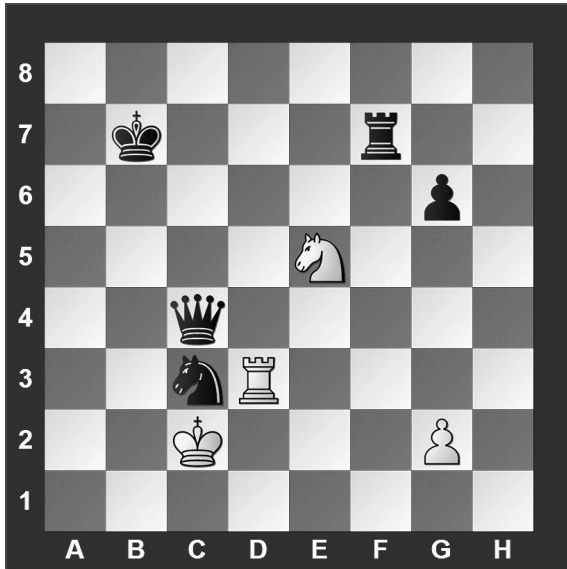
#12. White to move



What is White's best move?

- a) ♖g1
- b) ♗×d8
- c) ♖×g4
- d) ♖g3

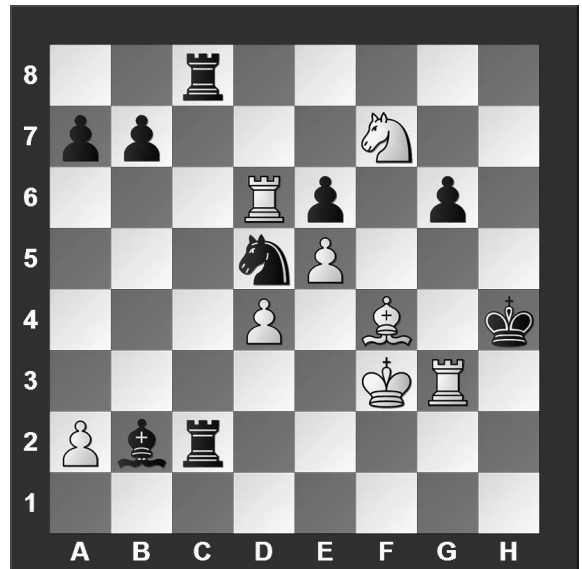
#13. White to move



What piece should White capture?

- a) Queen.
- b) Rook.
- c) Knight.
- d) Pawn.

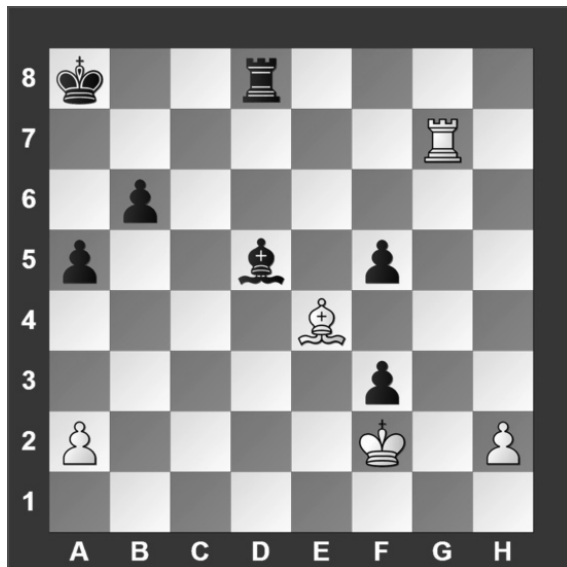
#14. White to move



If White can checkmate Black in two moves, what's the first move?

- a) ♖h3
- b) ♖g4
- c) ♕g5
- d) ♖x d5

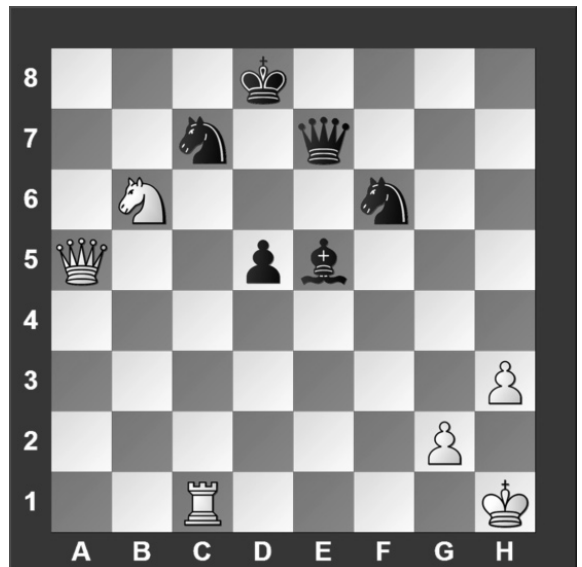
#15. White to move



What is White's best move?

- a) ♕x d5
- b) ♕x f5
- c) ♖g8
- d) ♕x f3

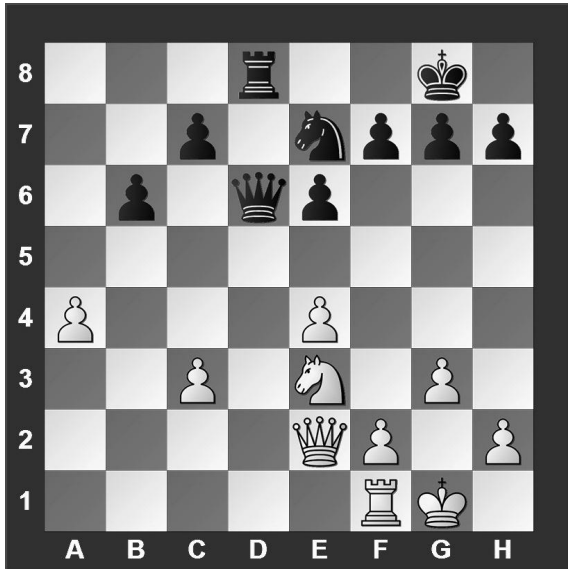
#16. White to move



White can checkmate Black in two moves, what is the *first* move?

- a) ♘x d5
- b) ♚a8
- c) ♖x c7
- d) ♚x d5

#17. White to move



What is White's best move?

- a) e5
- b) ♘c4
- c) ♖d1
- d) ♔g2

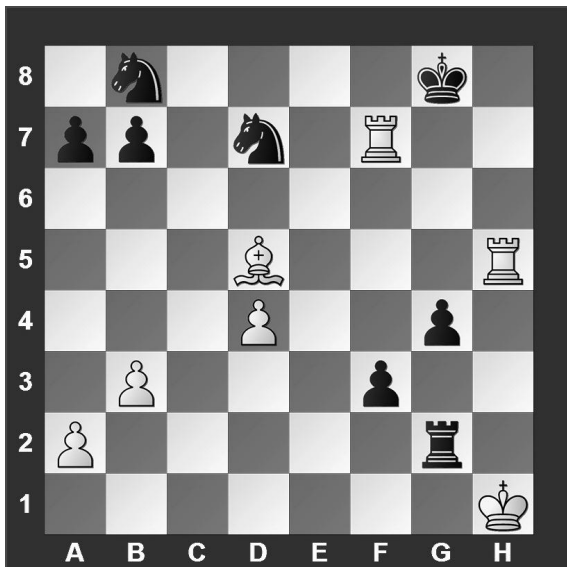
#18. White to move



How many moves does it take to checkmate Black?

- a) 1
- b) 2
- c) 3
- d) There is no checkmate

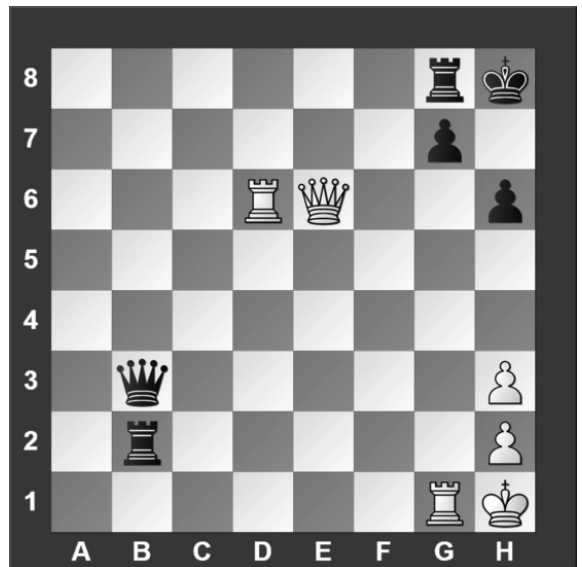
#19. White to move



If White can checkmate Black in two moves, what's the first move?

- a) ♖h8
- b) ♖f8
- c) ♖x d7
- d) ♕x f3

#20. White to move



If White can checkmate Black in two moves, what's the *first* move?

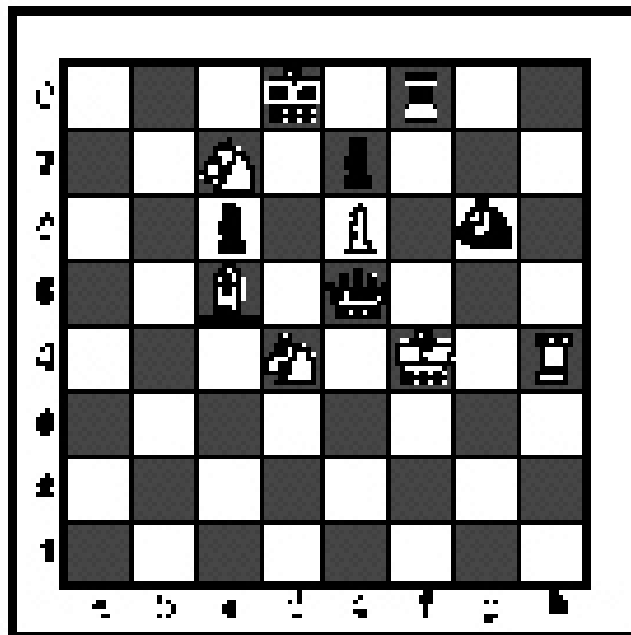
- a) ♔xg8
- b) ♖xg7
- c) ♔xh6
- d) ♔g6

INVITATIONAL 2022-2023

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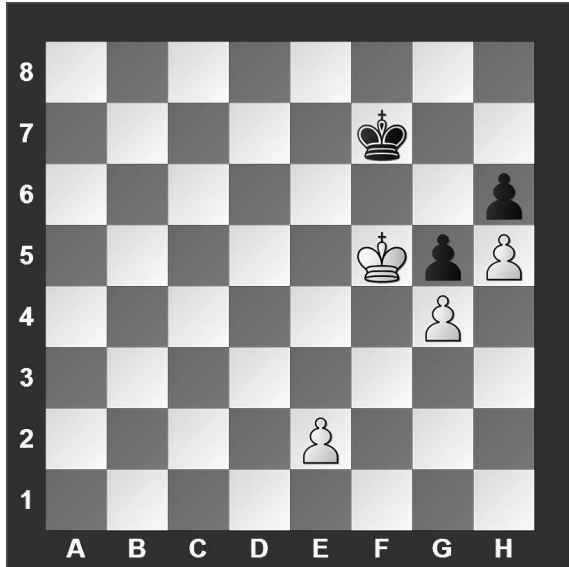


Chess Puzzle Solving

TIEBREAKER - ALL GRADES

**DO NOT OPEN TEST
UNTIL TOLD TO DO SO**

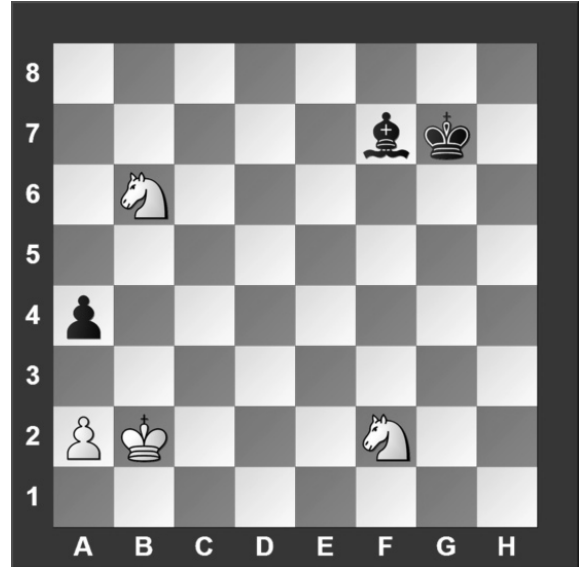
#1. White to move



What should be the outcome of the game?

- a) White wins.
- b) Black wins.
- c) Draw.
- d) It is not possible to tell.

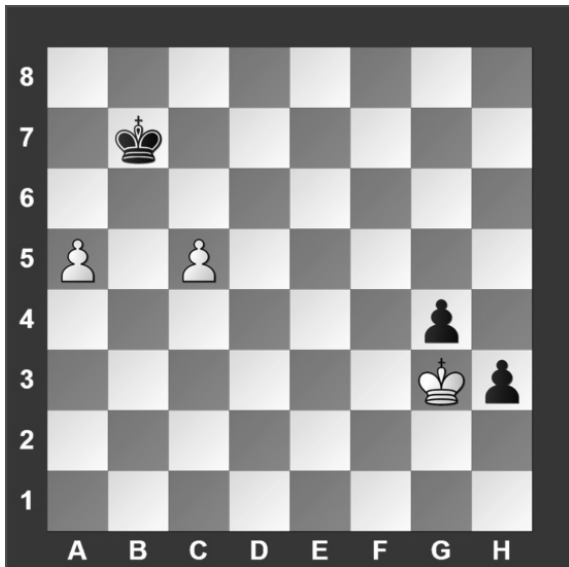
#2. White to move



What is White's best move?

- a) a3
- b) ♘×a4
- c) ♖a3
- d) ♘e4

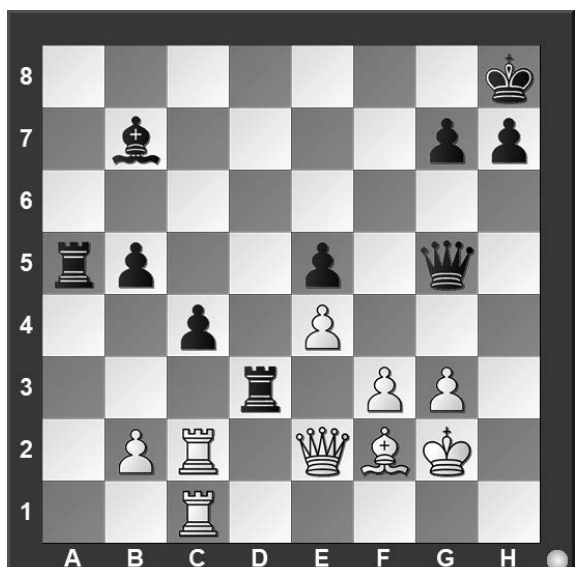
#3. White to move



With the best play, what is the outcome of the game?

- a) White wins.
- b) Black wins.
- c) Draw.
- d) It is not possible to tell.

#4. White to move



What is White's best move?

- a) ♖d1
- b) ♕×d3
- c) b4
- d) ♙b6

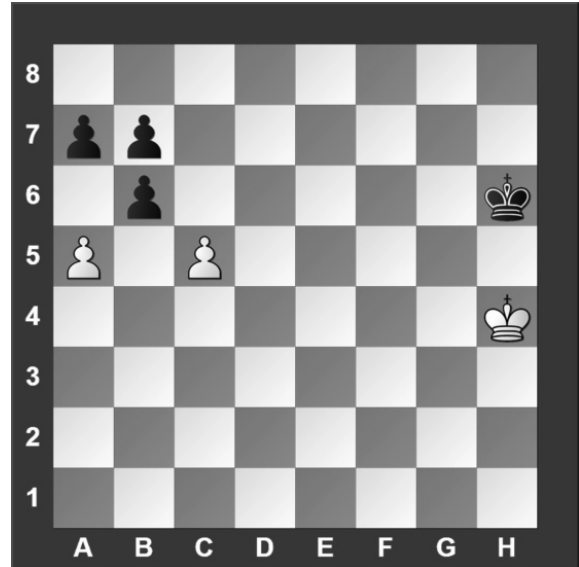
#5. White to move



What is White's best move?

- a) Ng6
- b) Nd5
- c) Qxb5
- d) Nc6

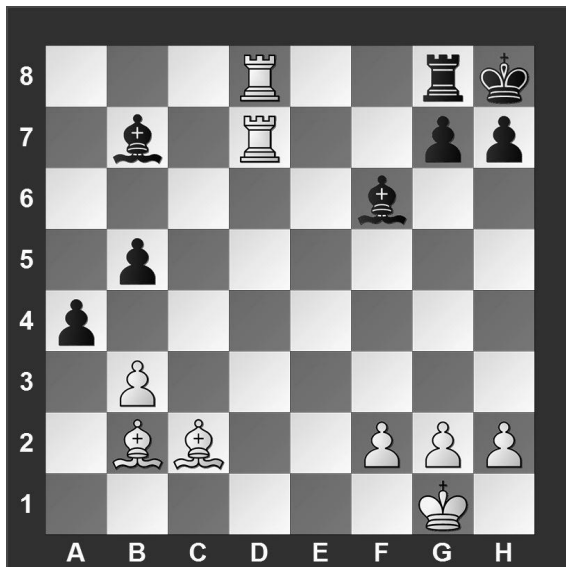
#6. White to move



What is White's best move?

- a) c6
- b) cxb6
- c) axb6
- d) a6

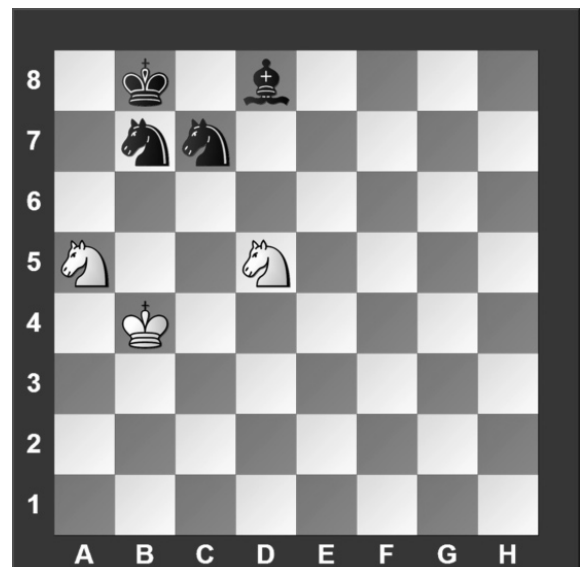
#7. White to move



If White can checkmate Black in two moves, what is White's first move?

- a) Rg8
- b) Rb7
- c) Rg7
- d) Qxf6

#8. White to move



With the best play, what is the outcome of the game?

- a) White wins.
- b) Black wins.
- c) Draw.
- d) It is not possible to tell.



**University Interscholastic League
A+ Chess Puzzle Contest
2022-2023 Invitational — Grades 6, 7, and 8
ANSWER KEY**

Test

- | | |
|------|-------|
| 1. C | 11. B |
| 2. B | 12. C |
| 3. B | 13. A |
| 4. C | 14. C |
| 5. D | 15. C |
| 6. B | 16. B |
| 7. C | 17. C |
| 8. C | 18. A |
| 9. C | 19. C |
| 10.A | 20. C |

Tiebreaker

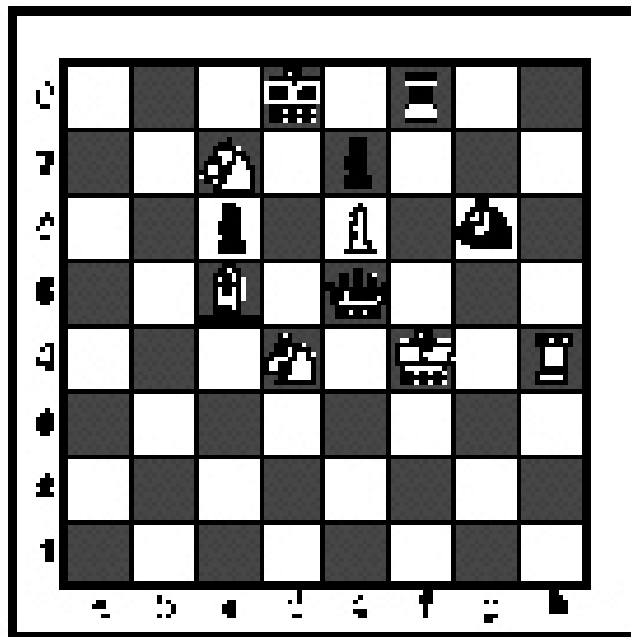
- | | |
|------|------|
| 1. A | 5. A |
| 2. A | 6. D |
| 3. C | 7. D |
| 4. B | 8. A |

FALL/WINTER DISTRICT 2022-2023

A+ ACADEMICS



University Interscholastic League



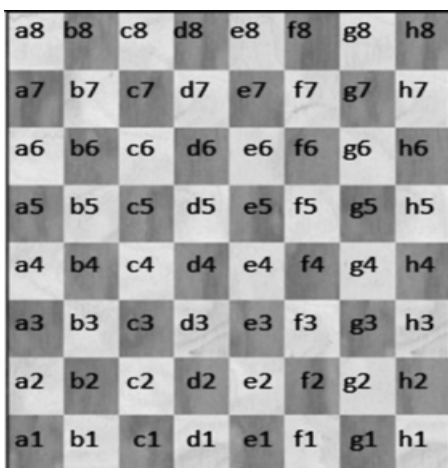
Chess Puzzle Solving

grades 6, 7, 8

**DO NOT OPEN TEST
UNTIL TOLD TO DO SO**

How to read and answer questions on this test

- To answer the questions on this test, you'll need to know how to read chess moves. It's simple to do.
- Every square on the board has an "address" made up of a letter and a number.

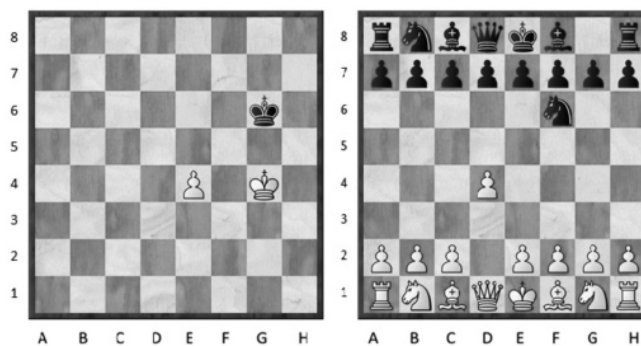


Piece Names	Each chessman can also be represented by a symbol, except for the pawn. (Figurine Notation)
King	
Queen	
Rook	
Bishop	
Knight	
Pawn	a-h (We write the file it's on.)

- To make them easy to read, the questions on this test use the figurine piece symbols on the right, above.
- When answering the puzzle questions, remember that white pawns move "up" the diagrams. Black pawns move "down" the diagrams.

At right are two sample moves.

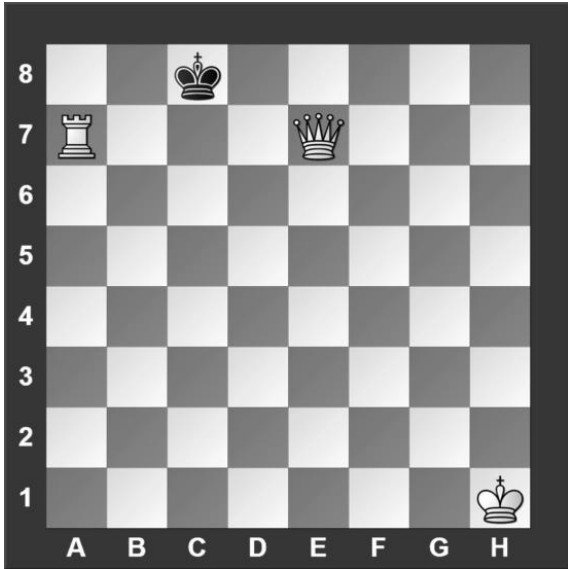
If you look closely at the diagrams in the questions below, you'll see that the frame around the diagram labels the ranks (1-8) and files (a-h) to help you.



White has just played **e4**.

Black has just played ... **Nf6**.

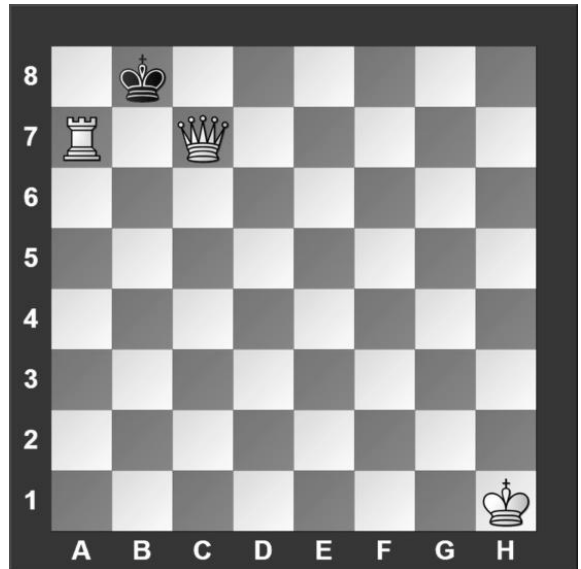
#1. Black to move



What term best describes this situation?

- a) Black is in checkmate.
- b) Black is in stalemate.
- c) Black is in check.
- d) None of the above.

#2. Black to move



What term best describes this situation?

- a) Black is in checkmate.
- b) Black is in stalemate.
- c) Black is in check.
- d) None of the above.

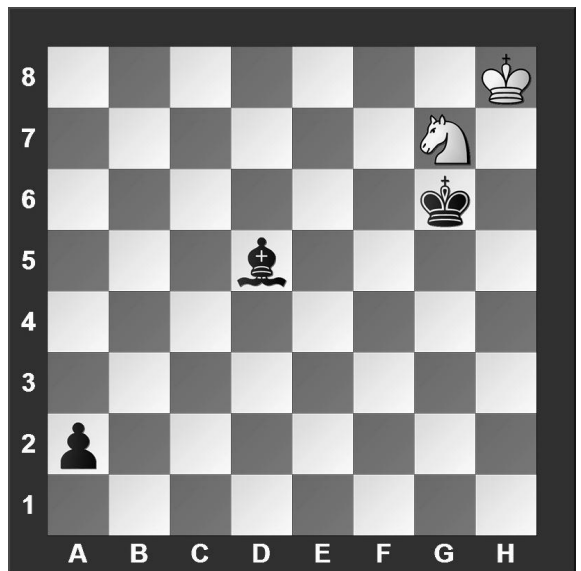
#3. Black to move



What term best describes this situation?

- a) Black is in checkmate.
- b) Black is in stalemate.
- c) Black is in check.
- d) None of the above.

#4. Black to move



What piece should Black promote to?

- a) Bishop.
- b) Queen.
- c) Knight.
- d) Rook.

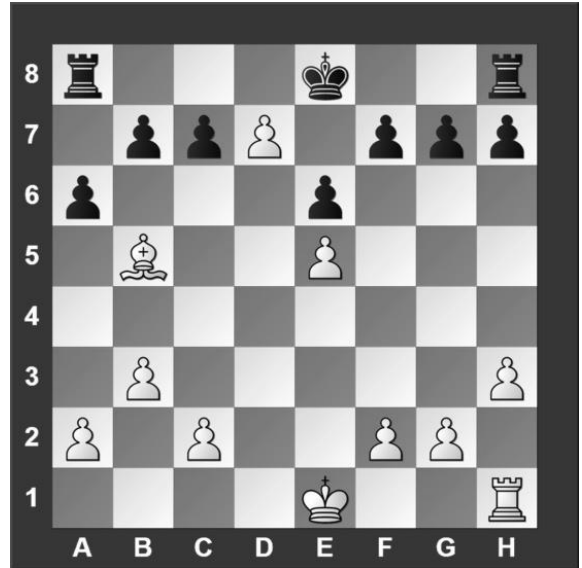
#5. White to move



Which side has material advantage?

- a) White.
- b) Black.
- c) It is even.
- d) It is not possible to tell.

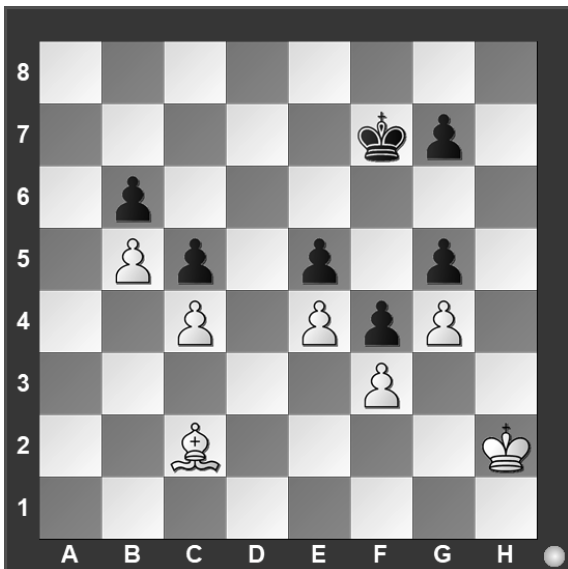
#6. Black to move



Which move is possible for Black?

- a) Short Castle.
- b) Long Castle.
- c) Both A and B.
- d) Neither A or B.

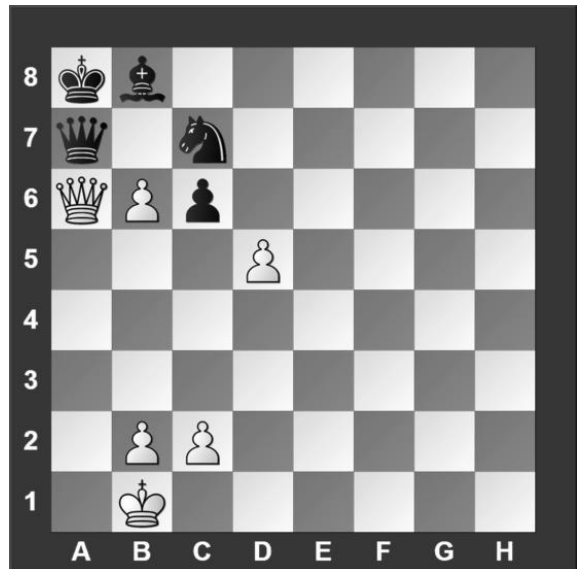
#7. White to move



What is the outcome of the game?

- a) White wins.
- b) Black wins.
- c) Draw.
- d) It is not possible to tell.

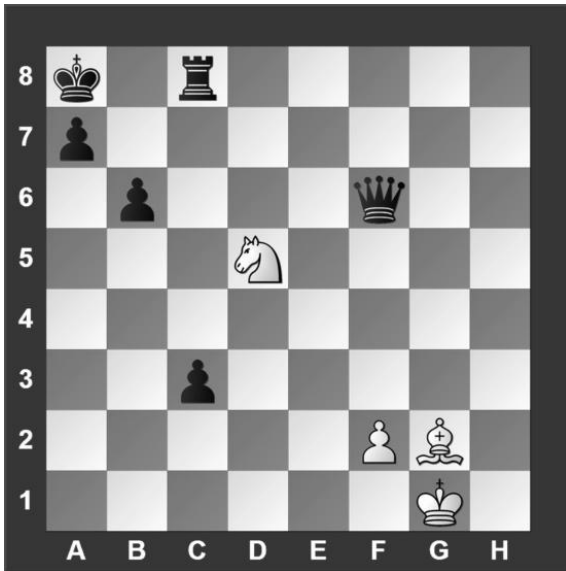
#8. White to move



What is White's best move?

- a) **bxa7**
- b) **bxc7**
- c) **♔xa7**
- d) **b7**

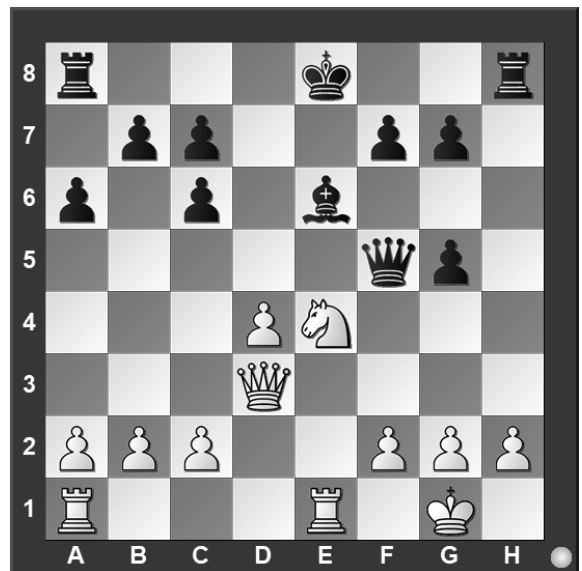
#9. White to move



White can checkmate Black in two moves, what is the *first* move?

- a) ♖xf6
- b) ♖xb6
- c) ♖c7
- d) ♖b4

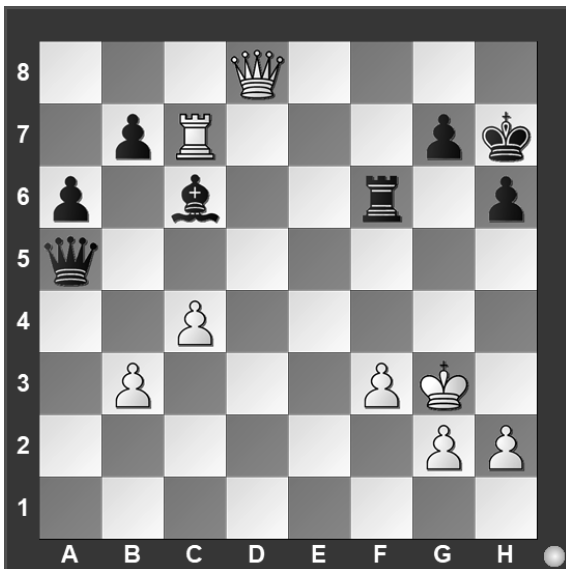
#10. White to move



What is White's best move?

- a) ♖d6
- b) ♖f6
- c) ♕g3
- d) c4

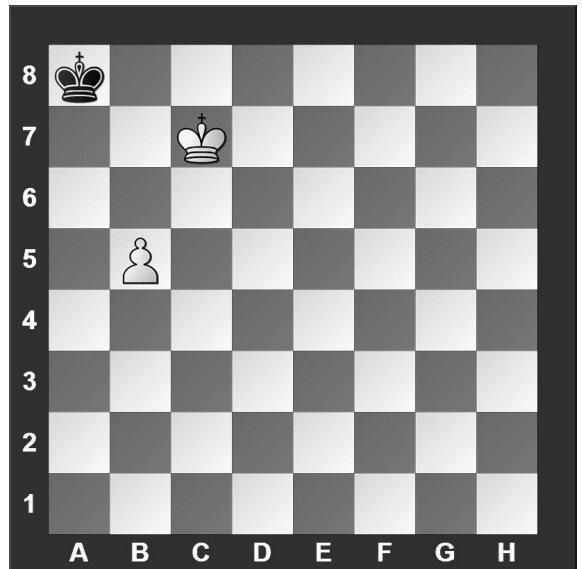
#11. White to move



What is White's best move?

- a) ♕e7
- b) ♕xf6
- c) ♖xg7
- d) ♖c8

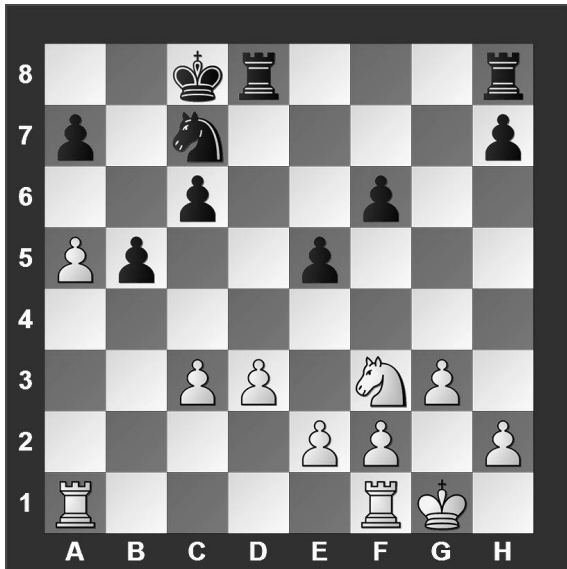
#12. White to move



What is White's best move?

- a) ♖b6
- b) b6
- c) ♖d8
- d) ♖d7

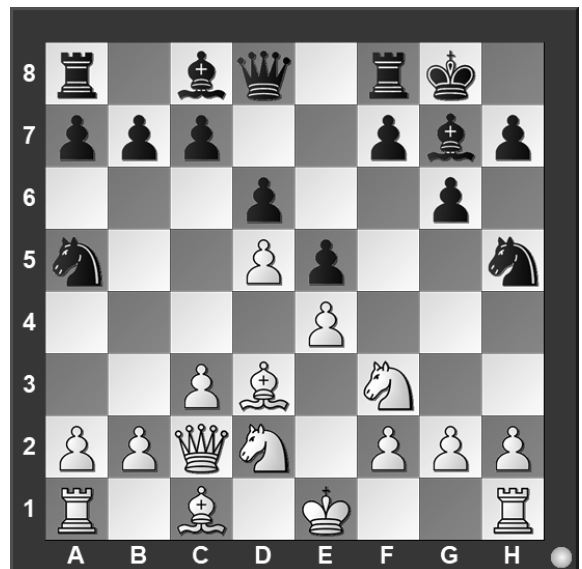
#13. White to move



Black just played b7 to b5. Which pawn can be captured?

- a) Black's a-pawn.
- b) Black's f-pawn.
- c) Black's h-pawn.
- d) Black's b-pawn.

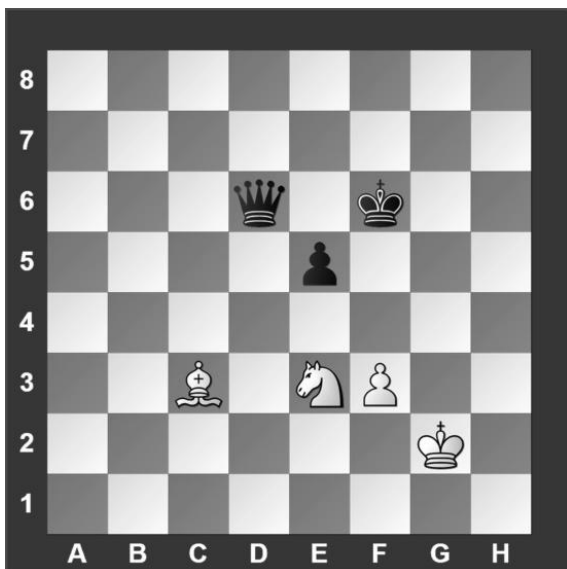
#14. White to move



What is White's best move?

- a) 0-0
- b) g3
- c) ♘c4
- d) b4

#15. White to move



What is White's best move?

- a) ♘g4
- b) ♙x e5
- c) f4
- d) ♘c4

#16. Black to move



What move below is possible for Black?

- a) Short Castle.
- b) Long Castle.
- c) To capture the bishop.
- d) None of the above.

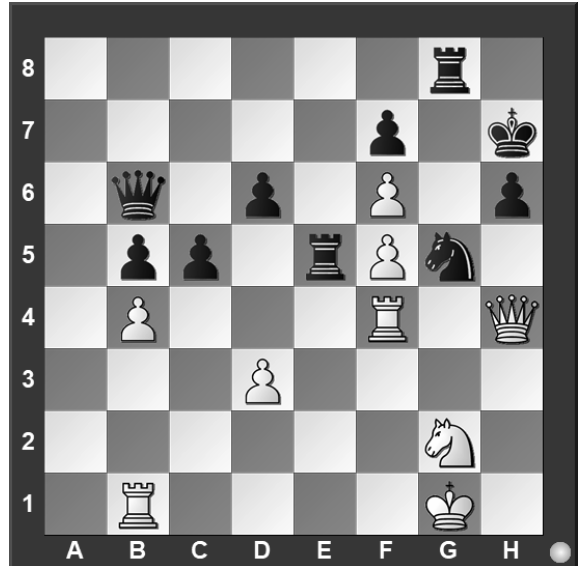
#17. White to move



What is White's best move?

- a) ♖e7
- b) ♖xc8
- c) ♗xf5
- d) a4

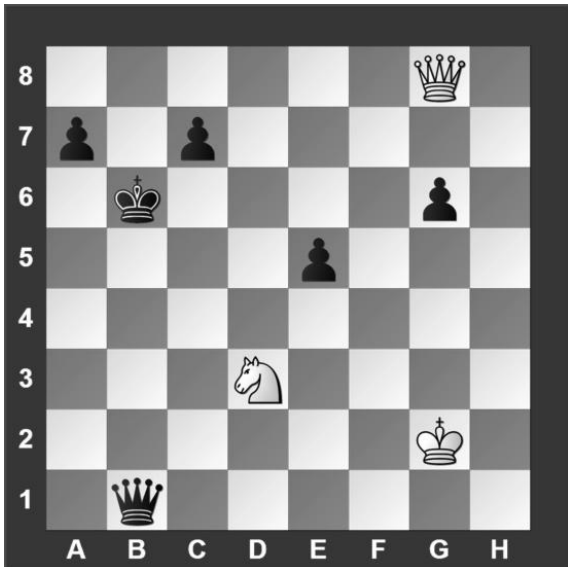
#18. White to move



What is White's best move?

- a) ♔f1
- b) ♗xh6
- c) ♗h2
- d) ♖bf1

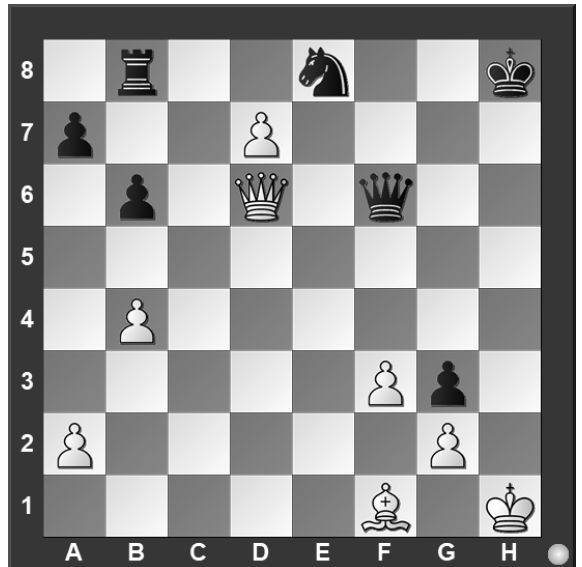
#19. White to move



What is White's best move?

- a) ♗b8
- b) ♗e6
- c) ♗xg6
- d) ♘xe5

#20. White to move



What piece should White capture?

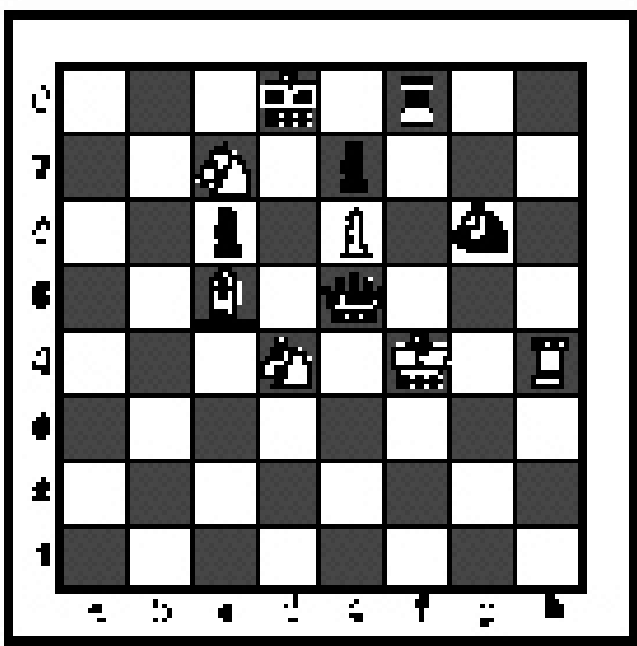
- a) Queen
- b) Rook
- c) Knight
- d) pawn

FALL/WINTER DISTRICT 2022-2023

A+ ACADEMICS



University Interscholastic League



Chess Puzzle Solving

TIEBREAKER - ALL GRADES

**DO NOT OPEN TEST
UNTIL TOLD TO DO SO**

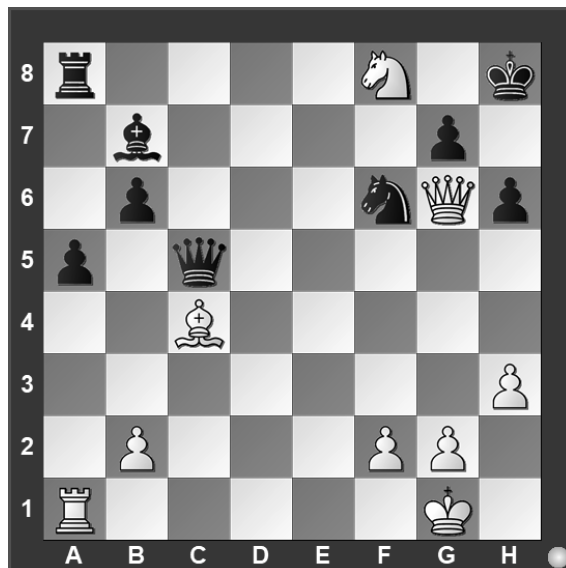
#1. White to move



What is White's best move?

- a) $\text{Q} \times \text{b5}$
- b) $\text{a} \times \text{b5}$
- c) $\text{K} \times \text{d5}$
- d) $\text{N} \text{e5}$

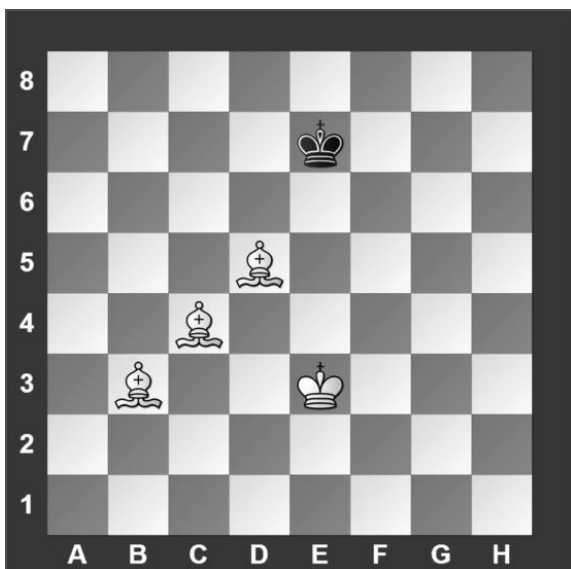
#2. White to move



If White can checkmate Black in two moves, what's the *first* move?

- a) $\text{N} \text{e6}$
- b) $\text{K} \times \text{g7}$
- c) $\text{K} \times \text{h7}$
- d) $\text{Q} \text{d3}$

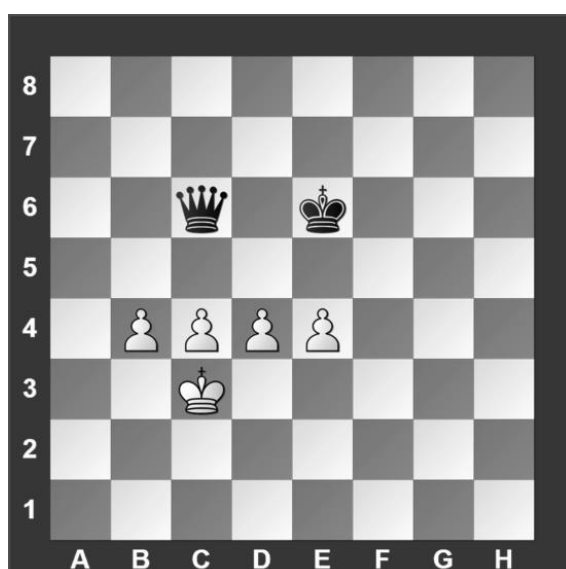
#3. White to move



What should be the outcome of the game?

- a) White wins.
- b) Black wins.
- c) Draw.
- d) It is not possible to tell.

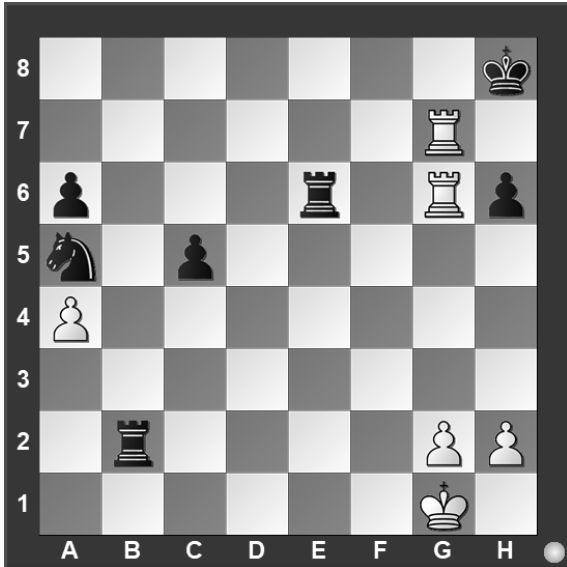
#4. White to move



What is White's best move?

- a) **b5**
- b) **c5**
- c) **d5**
- d) **e5**

#5. White to move



How many moves does it take to checkmate Black?

- a) 1
- b) 2
- c) 3
- d) There is no checkmate

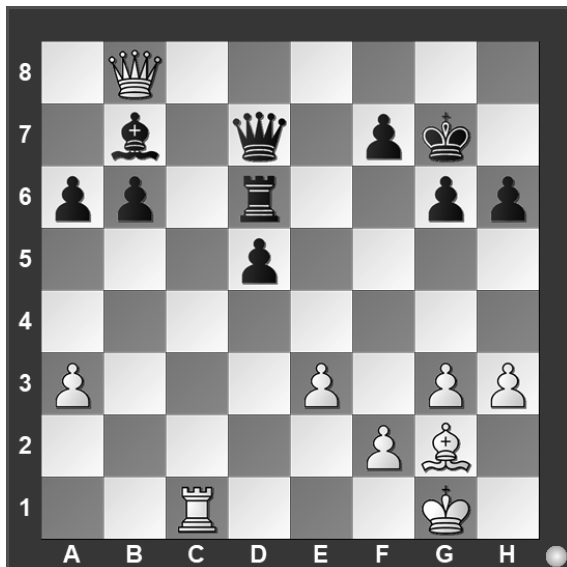
#6. White to move



If White can force checkmate in three moves, what is the last move?

- a) ♖f6
- b) ♖b6
- c) ♖d8
- d) ♖a8

#7. White to move



What is White's best move?

- a) ♖c7
- b) h4
- c) ♖c7
- d) ♕f3

#8. White to move



If White can checkmate Black in two moves, what is White's second move?

- a) ♖x b7
- b) ♖c7
- c) ♖x c8
- d) ♕x b7



**University Interscholastic League
A+ Chess Puzzle Contest
2022-2023 Fall/Winter — Grades 6, 7, and 8
ANSWER KEY**

Test

- | | |
|-------|-------|
| 1. D | 11. C |
| 2. A | 12. A |
| 3. B | 13. D |
| 4. D | 14. D |
| 5. A | 15. B |
| 6. D | 16. D |
| 7. C | 17. B |
| 8. D | 18. B |
| 9. C | 19. A |
| 10. A | 20. C |

Tiebreaker

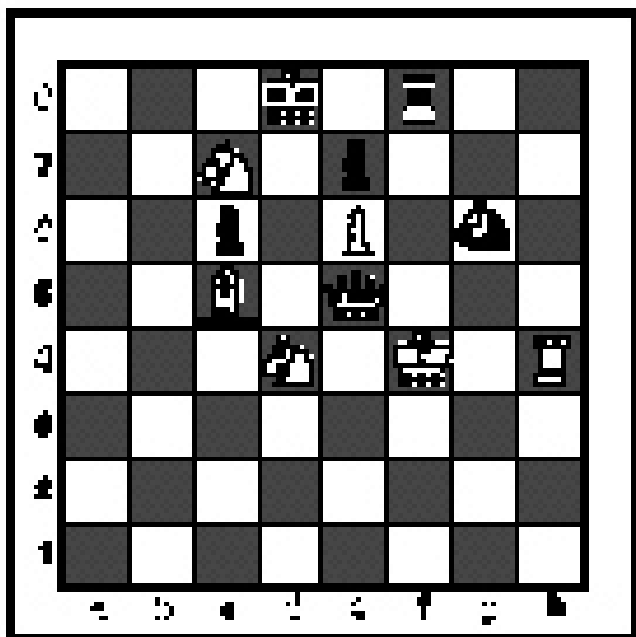
- | | |
|------|------|
| 1. B | 5. B |
| 2. C | 6. D |
| 3. C | 7. A |
| 4. C | 8. C |

SPRING DISTRICT 2022-2023

A+ ACADEMICS



University Interscholastic League



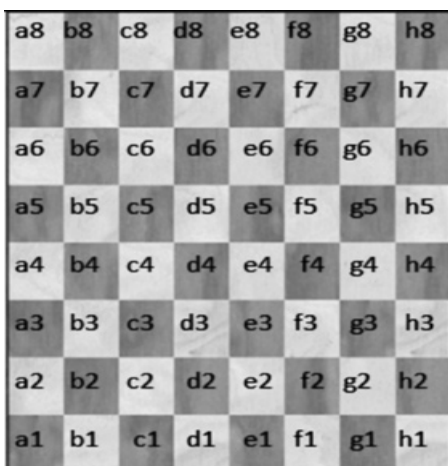
Chess Puzzle Solving

grades 6, 7, 8

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How to read and answer questions on this test

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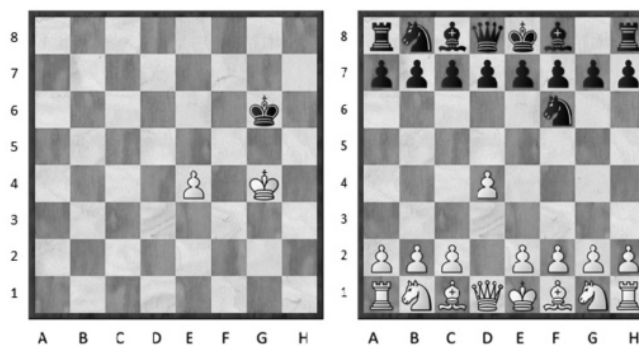


Piece Names	Each chessman can also be represented by a symbol, except for the pawn. (Figurine Notation)
King	
Queen	
Rook	
Bishop	
Knight	
Pawn	a-h (We write the file it's on.)

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- When answering the puzzle questions, remember that white pawns move "up" the diagrams. Black pawns move "down" the diagrams.

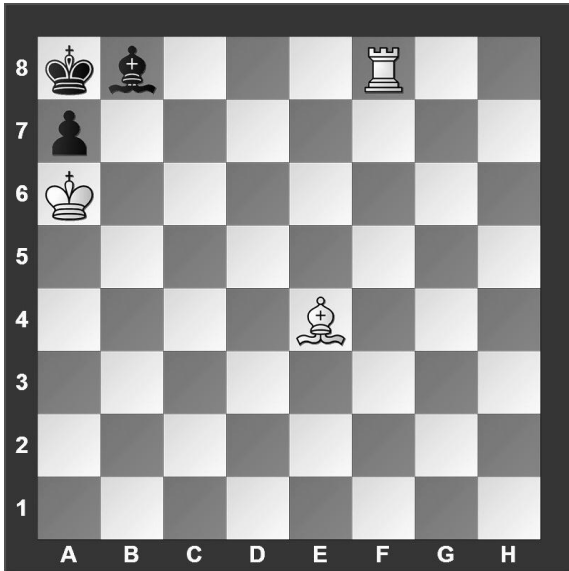
At right are two sample moves.

If you look closely at the diagrams in the questions below, you'll see that the frame around the diagram labels the ranks (1-8) and files (a-h) to help you.



White has just played **e4**. Black has just played ... **f6**

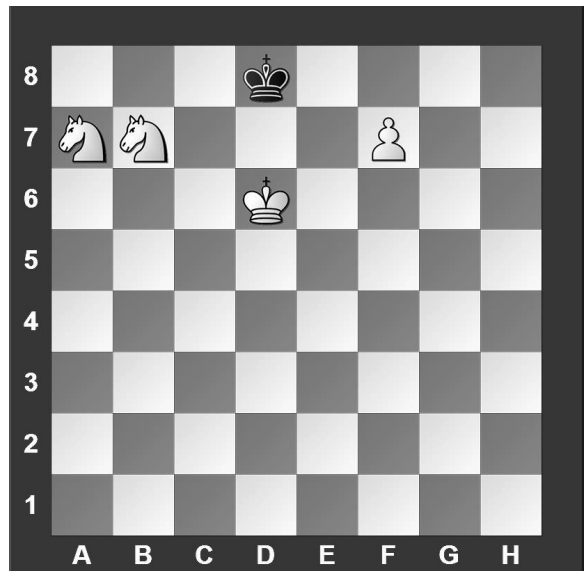
#1. Black to move



What term best describes this situation?

- a) Black is in checkmate.
- b) Black is in stalemate.
- c) Black is in check.
- d) None of the above.

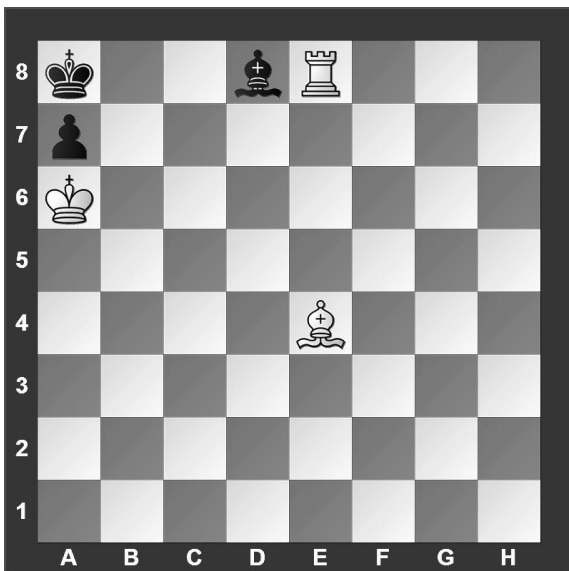
#2. Black to move



What term best describes this situation?

- a) Black is in checkmate.
- b) Black is in stalemate.
- c) Black is in check.
- d) None of the above.

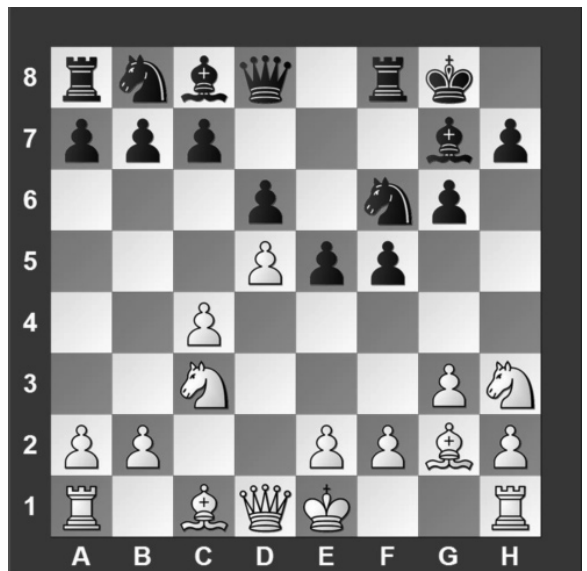
#3. Black to move



What term best describes this situation?

- a) Black is in checkmate.
- b) Black is in stalemate.
- c) Black is in check.
- d) None of the above.

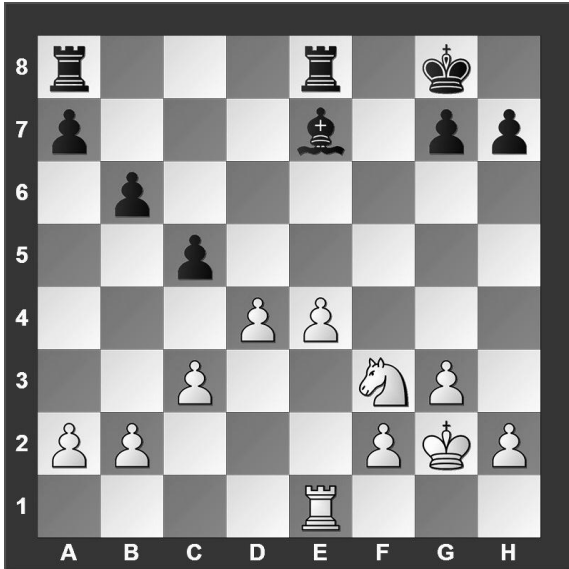
#4. White to move



Black just played e7 to e5. Which pawn can be captured?

- a) Black's b-pawn
- b) Black's d-pawn
- c) Black's c-pawn
- d) Black's e-pawn

#5.



Which side has material advantage?

- a) White
- b) It is even.
- c) Black
- d) It is not possible to tell.

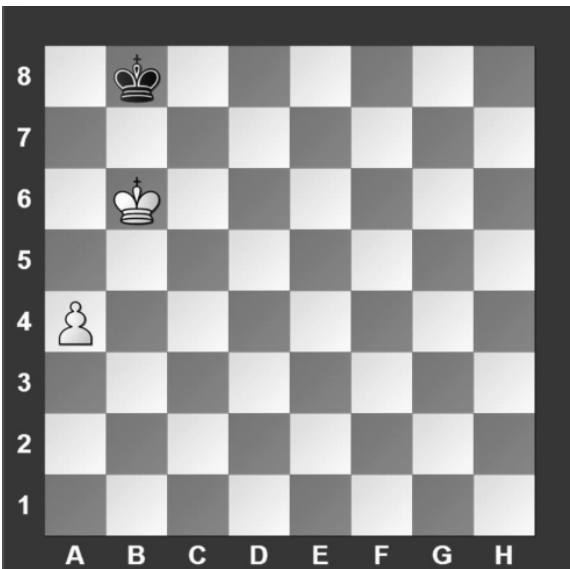
#6. Black to move



Which move is possible for Black?

- a) Short Castle.
- b) Long Castle.
- c) Take White's Queen
- d) Take White's Knight

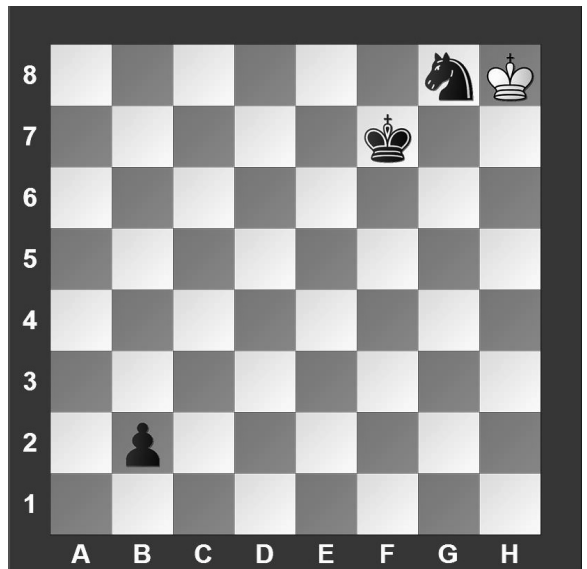
#7. White to move



With the best play, what is the outcome of the game?

- a) White wins
- b) Black wins
- c) Draw
- d) Impossible to tell

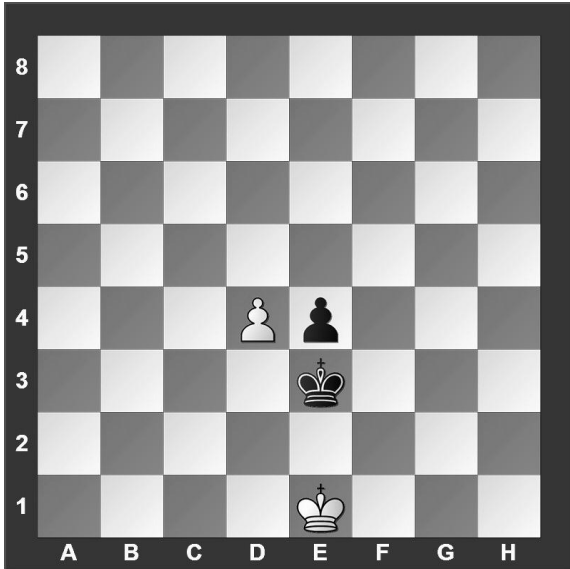
#8. Black to move



What is the best move?

- a) Promote to a Queen
- b) Promote to a Rook
- c) Promote to a Knight
- d) Promote to a Bishop

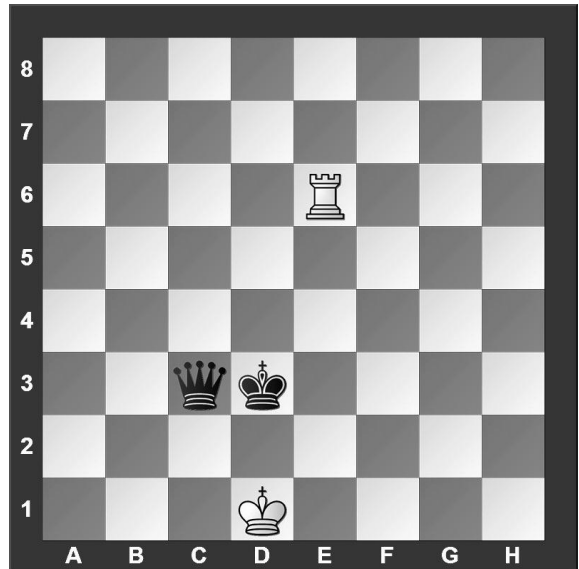
#9. White to move



What is the outcome of the game?

- a) Black wins.
- b) White wins.
- c) It is a draw.
- d) It is not possible to tell.

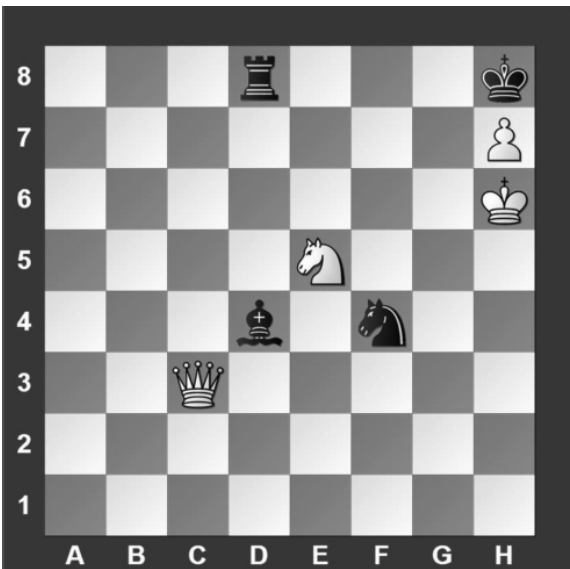
#10. White to move



What is White's best move?

- a) ♖d6
- b) ♖e3
- c) ♖c6
- d) ♖e2

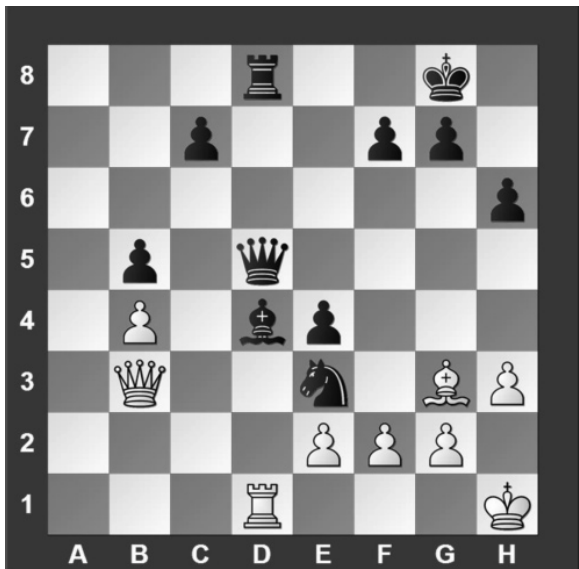
#11. White to move



What is White's best move?

- a) ♘g6
- b) ♘f7
- c) ♙g3
- d) ♙e3

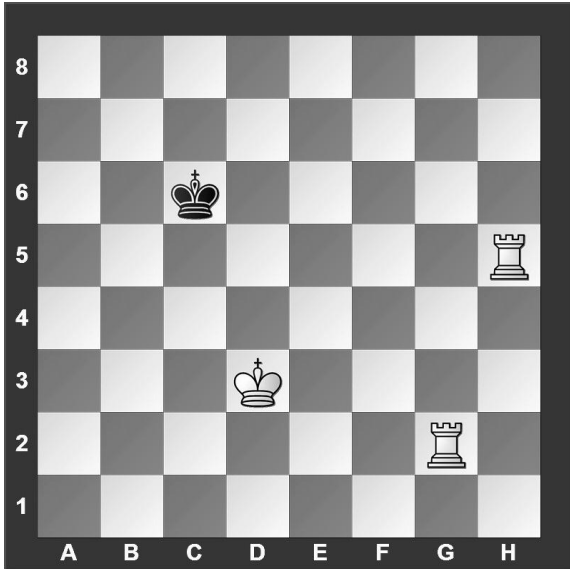
#12. White to move



What piece should White capture?

- a) Black's Knight
- b) Black's Queen
- c) Black's Bishop
- d) Black's Pawn

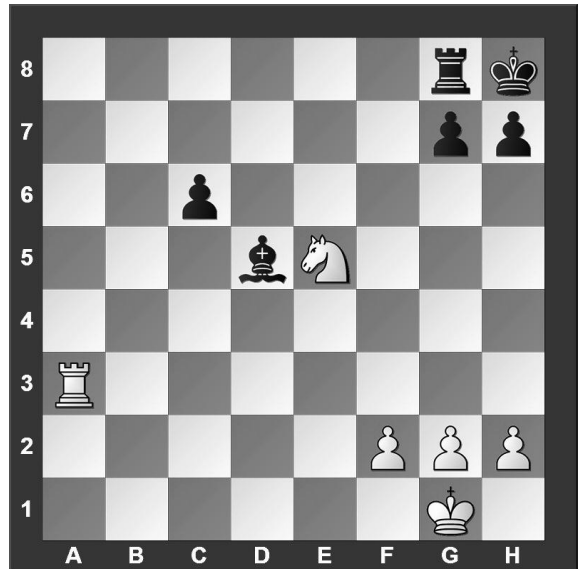
#13. White to move



How many moves should it take to checkmate Black in this position?

- a) One move.
- b) Two moves.
- c) Three moves.
- d) Four moves.

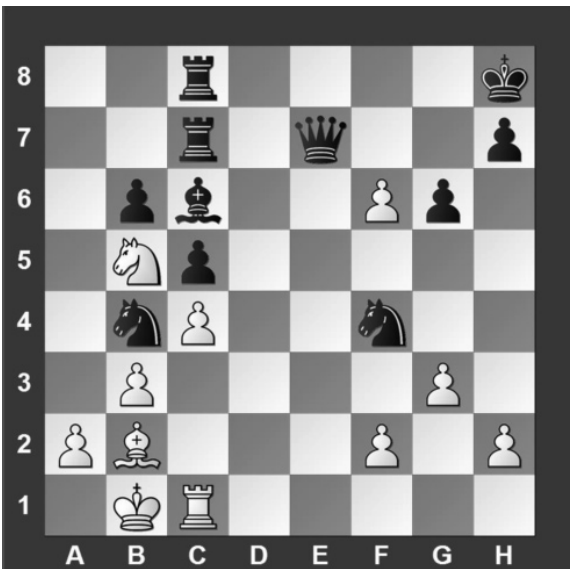
#14. White to move



What is White's best move?

- a) ♖g6
- b) ♖xc6
- c) ♜h3
- d) f4

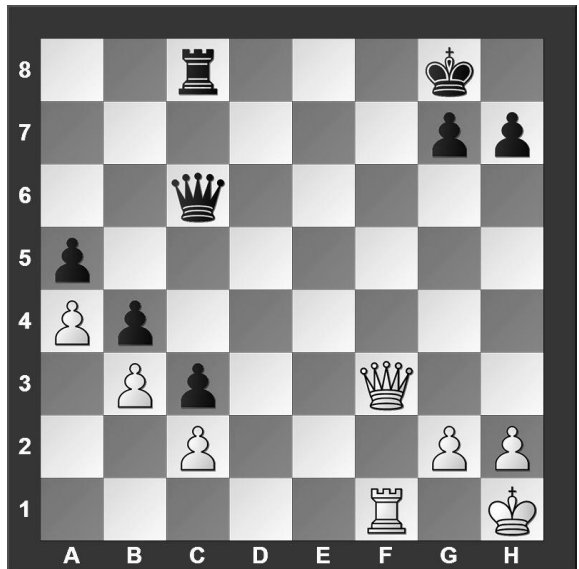
#15. White to move



What is White's best move?

- a) fxe7
- b) ♘xc7
- c) f7
- d) gxf4

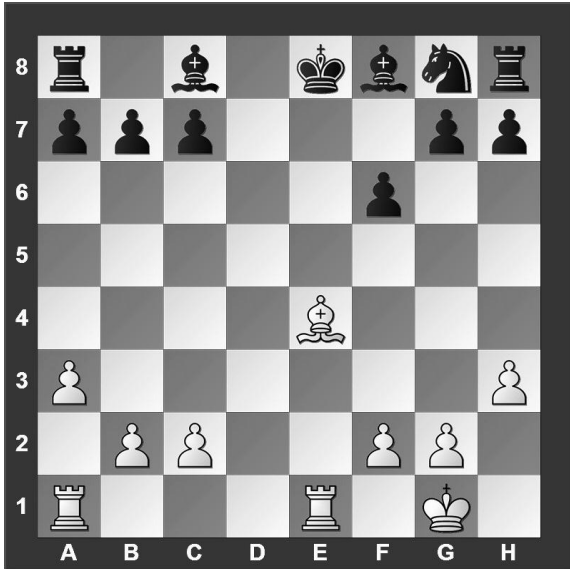
#16. White to move



If White can checkmate Black in three moves, what's the first move?

- a) ♔xc6
- b) ♔xc3
- c) ♔f8
- d) ♔f7

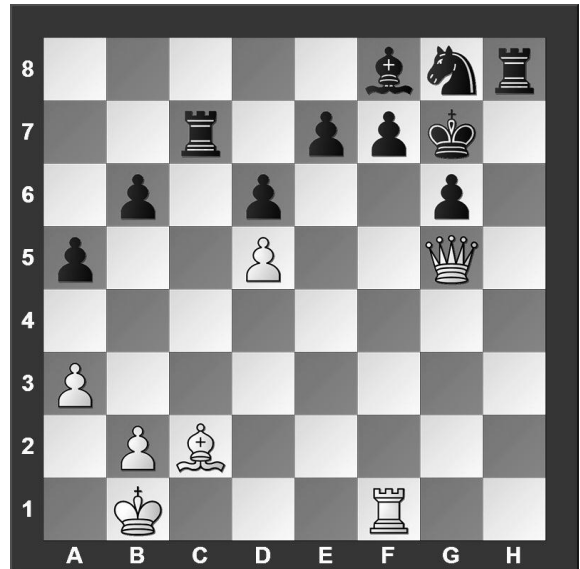
#17. White to move



If White can checkmate Black in two moves, what's the first move?

- a) ♕g6
- b) ♕c6
- c) ♕xh7
- d) ♕xb7

#18. White to move



What is White's best move?

- a) ♖xf7
- b) ♗xg6
- c) ♕xg6
- d) ♗xe7

#19. White to move



What is White's best move?

- a) ♘e4
- b) c3
- c) ♘h5
- d) f5

#20. White to move



If White can checkmate Black in two moves, what's the *first* move?

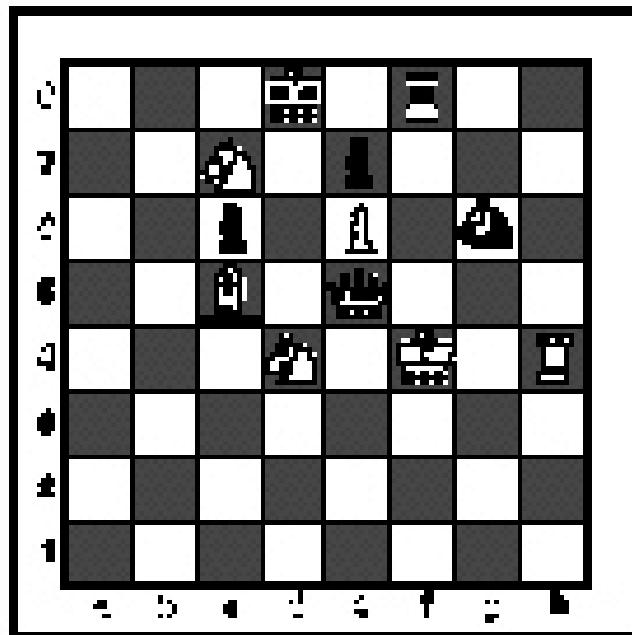
- a) ♖xd8
- b) ♖e7
- c) d7
- d) ♕xg4

SPRING DISTRICT 2022-2023

A+ ACADEMICS



University Interscholastic League



Chess Puzzle Solving

TIEBREAKER - ALL GRADES

**DO NOT OPEN TEST
UNTIL TOLD TO DO SO**

IMPORTANT INSTRUCTIONS:

This is the tiebreaker test for all grades for the Spring District UIL Chess Puzzle Solving Test.

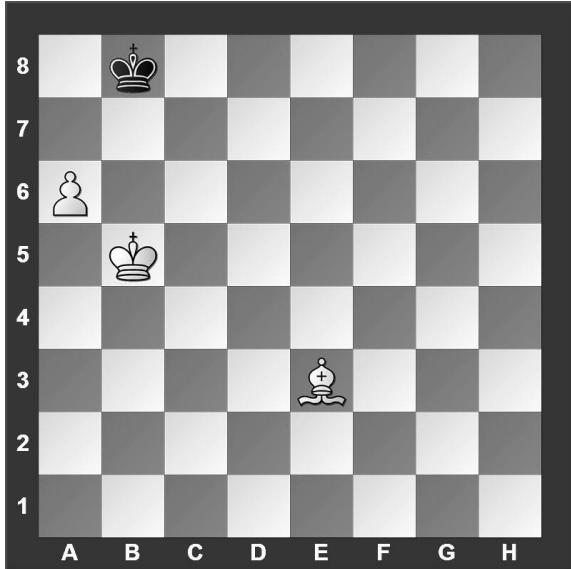
Use the separate answer sheet to write all your answers. You have five (5) minutes to take this part of the test. There are eight (8) questions. Some questions are very difficult.

As before, the symbols for check and checkmate commonly used after moves have been omitted because they would be hints.

Each correct answer earns you one point. There is no penalty for incorrect answers or unanswered questions.

These questions are hard, but the puzzles are interesting! Good luck and have fun!

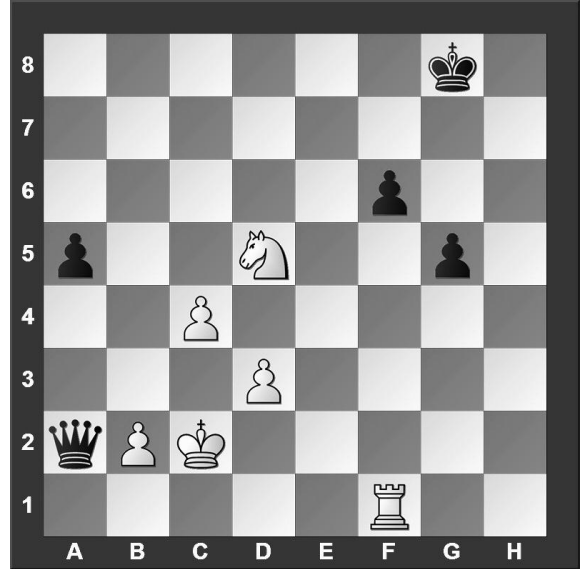
#1. White to move



What should be the outcome of the game?

- a) White wins.
- b) Black wins.
- c) Draw.
- d) It is not possible to tell.

#2. White to move



What is White's best move?

- a) ♘xf6
- b) ♘e7
- c) ♚xf6
- d) ♘c3

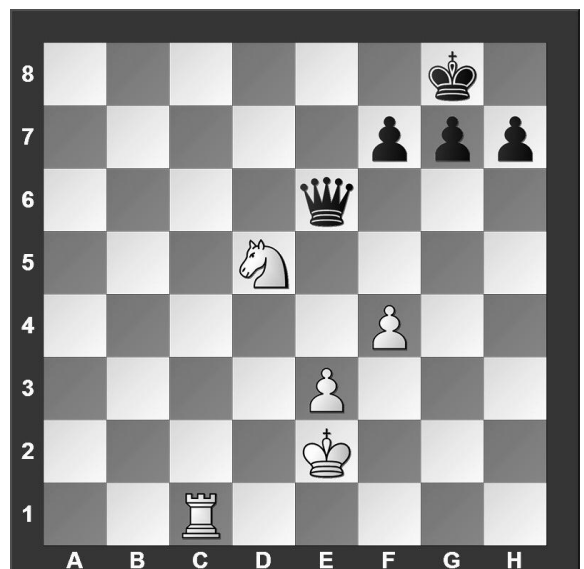
#3. White to move



What is White's best move

- a) ♕e3
- b) g5
- c) ♘a4
- d) ♘b5

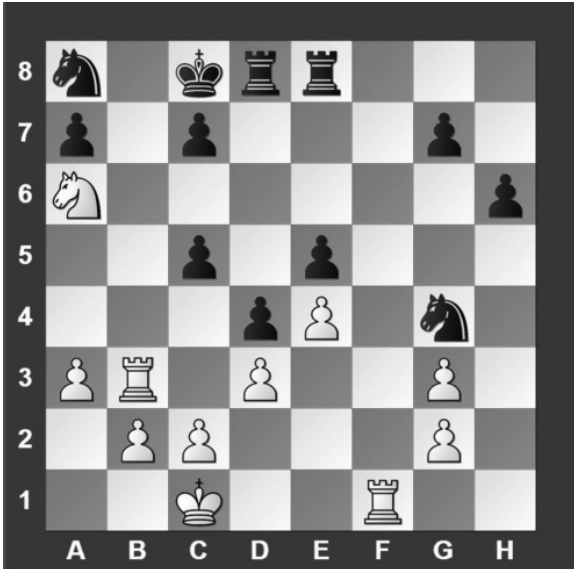
#4. White to move



What is White's best move?

- a) ♘e7
- b) ♘f6
- c) ♚c8
- d) f5

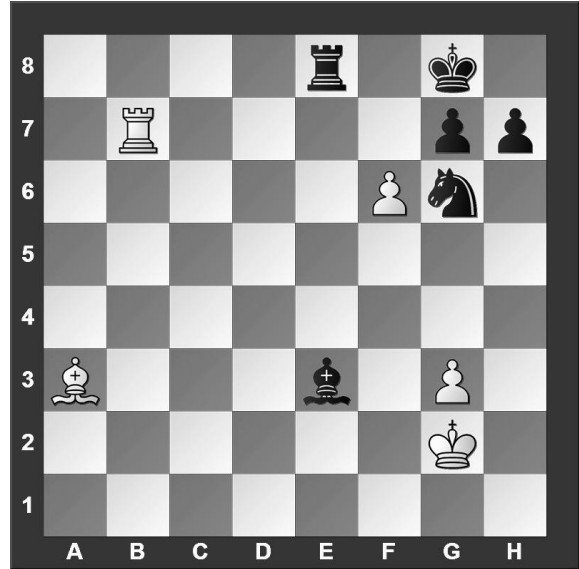
#5. White to move



What is White's best move?

- a) ♖f7
- b) ♖b8
- c) ♘xc5
- d) ♖f4

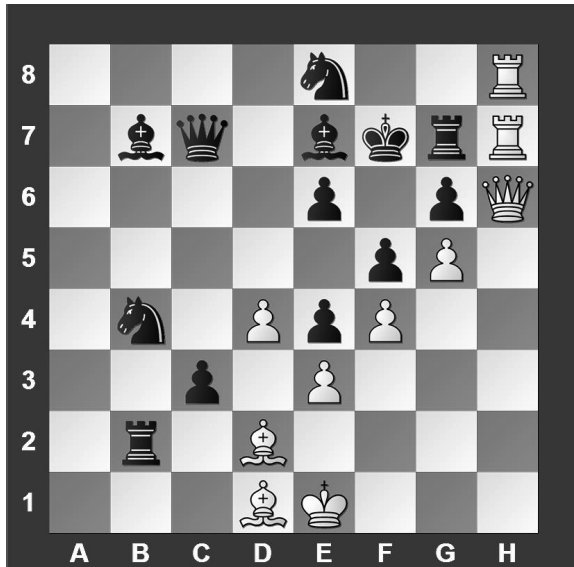
#6. White to move



What is White's best move?

- a) ♖xg7
- b) f×g7
- c) f7
- d) ♖e7

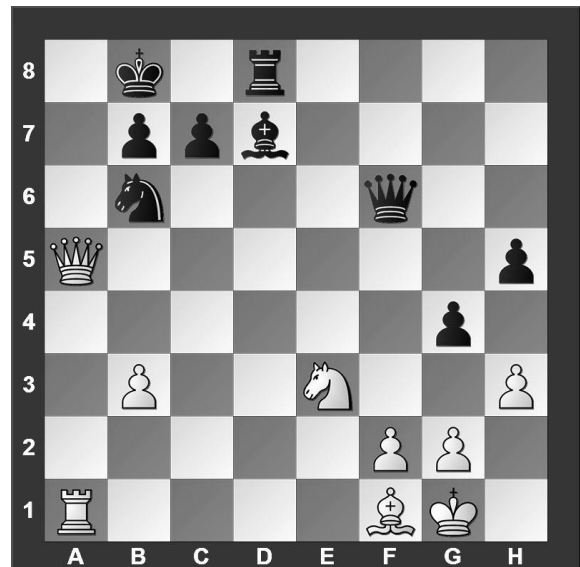
#7. White to move



If White can checkmate Black in two moves, what is White's *second* move?

- a) ♖xg7
- b) ♖xg7
- c) ♖xg6
- d) ♘h5

#8. White to move



If White can force checkmate in three moves, what is White's *first* move?

- a) ♖a8
- b) ♖a7
- c) ♘xg4
- d) h×g4



**University Interscholastic League
A+ Chess Puzzle Contest
2022-2023 Spring — Grades 6, 7, and 8
ANSWER KEY**

Test

- | | |
|-------|-------|
| 1. A | 11. B |
| 2. A | 12. B |
| 3. C | 13. C |
| 4. D | 14. A |
| 5. C | 15. C |
| 6. C | 16. D |
| 7. C | 17. B |
| 8. B | 18. A |
| 9. B | 19. B |
| 10. B | 20. B |

Tiebreaker

- | | |
|------|------|
| 1. C | 5. A |
| 2. D | 6. C |
| 3. C | 7. D |
| 4. C | 8. B |

CONTESTANT NUMBER:

FOR GRADER USE ONLY

Score Test Below:

_____ out of 120. Initials _____

_____ out of 120. Initials _____

Papers contending to place:

_____ out of 120. Initials _____



**University Interscholastic League
A+ Dictionary Skills Contest • Answer Sheet**

Write your contestant number in the upper right corner, and circle your grade below.

Circle Grade Level: 5 6 7 8

1. A B C D

2. A B C D

3. A B C D

4. A B C D

5. A B C D

6. A B C D

7. A B C D

8. A B C D

9. A B C D

10. A B C D

11. A B C D

12. A B C D

13. A B C D

14. A B C D

15. A B C D

16. A B C D

17. A B C D

18. A B C D

19. A B C D

20. A B C D

21. A B C D

22. A B C D

23. A B C D

24. A B C D

25. A B C D

26. A B C D

27. A B C D

28. A B C D

29. A B C D

30. A B C D

31. A B C D

32. A B C D

33. A B C D E F G H

34. A B C D E F G H

35. A B C D E F G H

36. A B C D E F G H

37. A B C D E F G H

38. A B C D E F G H

39. A B C D E F G H

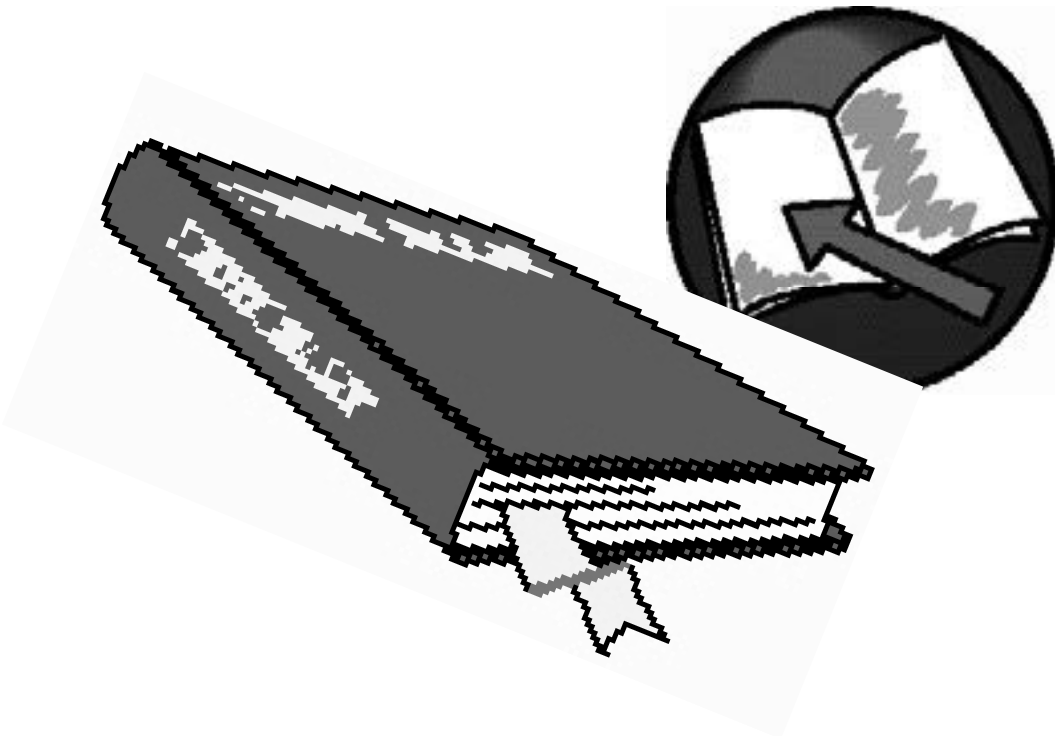
40. A B C D E F G H

INVITATIONAL 2022-2023

A+ ACADEMICS



University Interscholastic League



Dictionary Skills

grades 7 & 8

**DO NOT OPEN TEST
UNTIL TOLD TO DO SO**

**University Interscholastic League
2022-23 Dictionary Skills Contest
Invitational District Test — Grades 7 & 8**

1. One who is fecund is _____?
A. Wealthy
B. Fertile
C. Clever
D. Vulgar
2. The word quixotic is derived from the works of what author?
A. Jane Austen
B. Louis Sachar
C. Kurt Vonnegut
D. Miguel de Cervantes
3. A piece of candy could be described as which of the following adjectives?
A. Saccharine
B. Sumptuous
C. Somatic
D. Seditious
4. Katydid produce what kind of sound?
A. Song-like
B. High-pitched whistle
C. Low rumbling
D. Loud and shrill
5. In croquet, the ball must pass through what kind of obstacle?
A. Hoop
B. Arch
C. Goal
D. Wicket
6. Where in the human body would you find the duodenum?
A. Respiratory system
B. Circulatory system
C. Digestive system
D. Lymphatic system
7. Which of the following is a type of fruit?
A. Zygote
B. Kumquat
C. Postillion
D. Googol
8. What is the major difference between monotremes and mammals?
A. Mammals have fur
B. Mammals are warm-blooded
C. Mammals give birth to live young
D. Mammals have spines
9. One who is lacking strength may also be described as _____?
A. Lenient
B. Metropolitan
C. Effete
D. Gung ho

10. Akkadians lived in what ancient civilization?
A. Ancient Greece
B. Mesopotamia
C. Ancient Egypt
D. Aztec Empire
11. Which of the following phrases is a tautology?
A. Jumbo shrimp
B. Eggs in one basket
C. Prepay in advance
D. Thin as a rail
12. A joule is a measurement of what?
A. Speed
B. Length
C. Mass
D. Energy
13. Finish the statement: John loved to read; he was a _____ reader.
A. Voracious
B. Vainglorious
C. Vivacious
D. Virulent
14. Jasper is a type of which mineral?
A. Diamond
B. Garnet
C. Quartz
D. Sapphire
15. Which of the following is a synonym of opulence?
A. Affluence
B. Illusory
C. Manacle
D. Ovarian
16. Nephritis affects which organ in the human body?
A. Liver
B. Appendix
C. Kidney
D. Spleen
17. Another name for Vitamin B2 is _____?
A. Biotin
B. Riboflavin
C. Ascorbic acid
D. Retinol
18. Which of the following does NOT mean incipient?
A. Blossoming
B. Nascent
C. Growing
D. Mature
19. What ancient writing system utilized ideograms?
A. Egyptian hieroglyphics
B. Russian Cyrillic
C. Roman Latin
D. Danish runes
20. Complete the sentence: The Vice President serves _____ as president of the Senate.
A. Et cetera
B. Habeas corpus
C. Ad hominem
D. Ex officio

21. For a vehicle to be considered a jalopy, it must be _____?
 A. Expensive
 B. Reliable
 C. Dilapidated
 D. Modern
22. What blood type does a universal recipient have?
 A. O
 B. A
 C. B
 D. AB
23. Ephedrine is a medication used to reduce symptoms of _____?
 A. Fever
 B. Cough
 C. Nasal congestion
 D. Nausea
24. In music, to play a piece fortissimo means to play it _____?
 A. Slowly
 B. Quickly
 C. Quietly
 D. Loudly
25. Which of these is similar in meaning to bad luck?
 A. Jinx
 B. Junk
 C. Jute
 D. Jerk
26. What color is malachite?
 A. Blue
 B. Red
 C. Yellow
 D. Green
27. What does Rh factor affect?
 A. Height
 B. Blood type
 C. Weight
 D. Eye color
28. Which of the following is an ancient animal still seen today?
 A. Giant sloth
 B. Sabre-tooth tiger
 C. Woolly mammoth
 D. Coelacanth
29. What kind of location is a grange?
 A. Hospital
 B. School
 C. Farm
 D. Park
30. One who is a miser is very _____ with their money.
 A. Generous
 B. Frugal
 C. Stingy
 D. Reckless
31. A small round hill is also known as a _____?
 A. Knoll
 B. Inlet
 C. Peninsula
 D. Cove

32. Prior to being discovered as being carcinogenic, asbestos was used mainly in buildings to provide what benefit?

- A. Wall texture
- B. Waterproofing

- C. Fireproofing
- D. Window tinting

_____ 33. sallow

A. said to gain attention

_____ 34. slough

B. the lowest point

_____ 35. behoove

C. to shed or cast off

_____ 36. zwieback

D. a new word, usage, or expression

_____ 37. oyez

E. being necessary, proper, or advantageous

_____ 38. nadir

F. a grayish greenish yellow color

_____ 39. neologism

G. a reddish-brown bird

_____ 40. grouse

H. sweetened bread baked then toasted until dry

**University Interscholastic League
2022-23 Dictionary Skills Contest
Invitational Test — Grades 7 & 8**

Answer Key

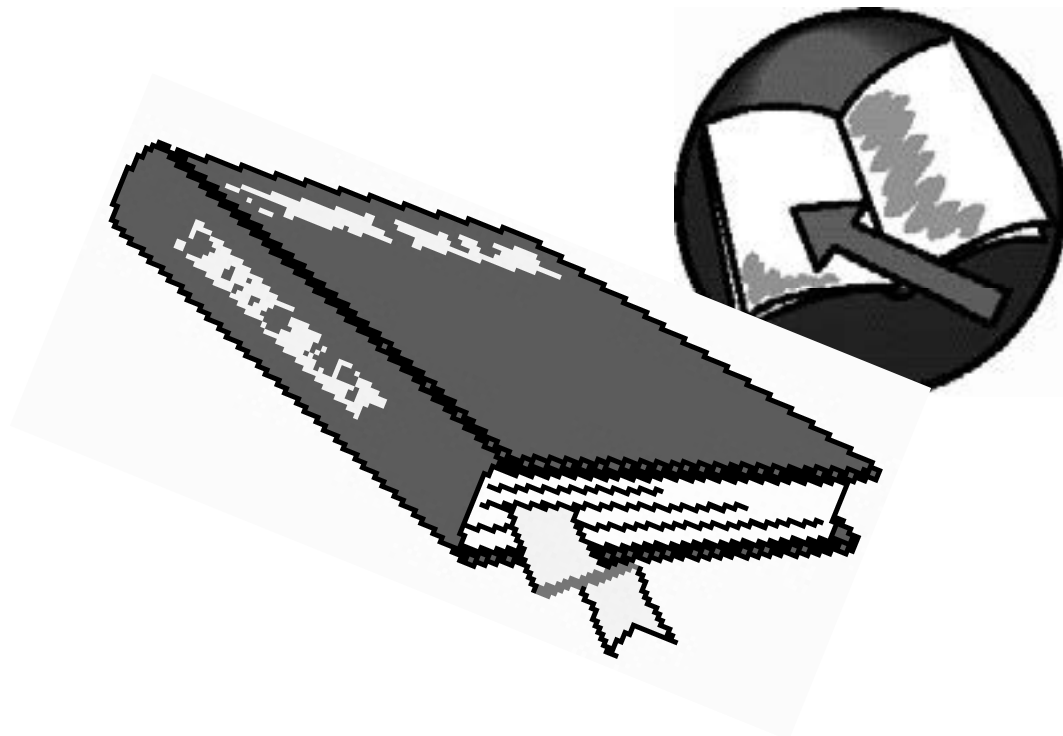
- | | |
|-------|-------|
| 1. B | 21. C |
| 2. D | 22. D |
| 3. A | 23. C |
| 4. D | 24. D |
| 5. D | 25. A |
| 6. C | 26. D |
| 7. B | 27. B |
| 8. C | 28. D |
| 9. C | 29. C |
| 10. B | 30. C |
| 11. C | 31. A |
| 12. D | 32. C |
| 13. A | 33. F |
| 14. C | 34. C |
| 15. A | 35. E |
| 16. C | 36. H |
| 17. B | 37. A |
| 18. D | 38. B |
| 19. A | 39. D |
| 20. D | 40. G |

FALL/WINTER DISTRICT 2022-2023

A+ ACADEMICS



University Interscholastic League



Dictionary Skills

grades 7 & 8

**DO NOT OPEN TEST
UNTIL TOLD TO DO SO**

**University Interscholastic League
2022-23 Dictionary Skills Contest
Fall/Winter District Test — Grades 7 & 8**

1. Which of the following occupations would be likely to use jargon?
A. Teacher
B. Journalist
C. Lawyer
D. Secretary
2. When illustrated on a map, isobars reflect changes in what measurement?
A. Temperature
B. Distance
C. Rainfall
D. Barometric pressure
3. An airplane reaches its zenith when it is _____?
A. About to take off
B. Coming in for landing
C. At its highest altitude
D. Parked at the gate
4. What color is oxblood?
A. Red-brown
B. Blue-green
C. Yellow-green
D. Orange-red
5. Which of the following is a synonym of panacea?
A. All-encompassing
B. Cover-all
C. Cure-all
D. All over
6. One who is taciturn is also _____?
A. Angry
B. Quiet
C. Sad
D. Creative
7. A Chimera is made up of which parts?
A. Dragon's head, serpent's body
B. Lion's body, bird's wings, woman's head
C. Lion's head, goat's body, serpent's tail
D. Human's head, horse's body
8. Which of the following is a synonym for maelstrom?
A. Wisecrack
B. Whirlpool
C. Wainscoting
D. Wanton
9. Who could be described as a huckster?
A. A doctor
B. A car salesman
C. A lawyer
D. A dentist

10. Leprosy affects which parts of the body?
 A. Skin and nerves
 B. Stomach and intestines
 C. Heart and lungs
 D. Brain and spinal cord
11. If an object were to ossify, what would it change into?
 A. Metal
 B. Sand
 C. Glass
 D. Bone
12. Which of the following words contains an umlaut?
 A. Façade
 B. Naïve
 C. Jalapeño
 D. Café
13. Ursa major is Latin for what phrase?
 A. Big star
 B. Great bear
 C. Close sun
 D. Large asteroid
14. Which of the following causes mange?
 A. Allergies
 B. Poison
 C. Skin mites
 D. Infected wound
15. Armadillos can be found in what part of the world?
 A. Eastern Europe and Middle East
 B. Northern Asia and Russia
 C. Southern U.S. and South America
 D. Australia
16. The trachea is involved in which bodily system?
 A. Nervous system
 B. Digestive system
 C. Respiratory system
 D. Circulatory system
17. One who is scrupulous has strong _____?
 A. Morals
 B. Muscles
 C. Mental faculties
 D. Management skills
18. Yorkshire pudding is comprised of meat drippings and what additional ingredients?
 A. Flour, sugar, butter
 B. Eggs, cream, vanilla extract
 C. Butter, milk, eggs
 D. Eggs, flour, milk
19. Which of the following situations features someone being obstreperous?
 A. A woman reading a book
 B. A teacher instructing her class
 C. A baby crying for its mother
 D. A man driving his car

20. Benzoyl peroxide is used in the treatment of what condition?
 A. Dandruff
 B. Eczema
 C. Acne
 D. Gingivitis
21. Which of the following is NOT a synonym of kowtow?
 A. Grovel
 B. Pander
 C. Genuflect
 D. Challenge
22. An oriole is a type of what animal?
 A. Bird
 B. Dog
 C. Cat
 D. Snake
23. Hemophilia occurs mainly in which kind of people?
 A. Children
 B. Women
 C. Elderly
 D. Men
24. If one is being implacable, then they are _____?
 A. Being stubborn
 B. Asking questions
 C. Running away
 D. Cleaning up
25. Hessians were mercenaries that assisted the British army during the American Revolution. What country were they from?
 A. France
 B. Spain
 C. Russia
 D. Germany
26. Which of the following gives guano its fertilizing power?
 A. Fruit and vegetable peels
 B. Cow droppings
 C. Bat excrement
 D. Plant clippings
27. Chlorofluorocarbons have been linked to what environmental problem?
 A. Ozone layer depletion
 B. Water pollution
 C. Acid rain
 D. Greenhouse gas emissions
28. What natural land formation is most similar to a grotto?
 A. Mountain
 B. Hill
 C. Cave
 D. Canyon
29. In a newspaper, an editorial is different from regular news coverage because it _____?
 A. Features eyewitness interviews
 B. Offers opinions
 C. Is sponsored by a business
 D. Contains pictures

30. People with diabetes must poke themselves with a _____ to check their blood sugar levels?

- A. Lancet
- B. Ligature
- C. Loquat
- D. Labrum

31. Ipecac is what kind of drug?

- A. Anti-inflammatory
- B. Blood thinner
- C. Emetic
- D. Antihistamine

32. A paladin could be found in which location?

- A. An airport
- B. On the beach
- C. On the battlefield
- D. In a forest

_____ 33. assiduous

A. to give up

_____ 34. quell

B. a light purplish blue

_____ 35. periwinkle

C. mischievous

_____ 36. relinquish

D. showing careful attention

_____ 37. insolent

E. to quiet or pacify

_____ 38. iliad

F. confusion or disorder

_____ 39. helter-skelter

G. being overbearing or contemptuous

_____ 40. impish

H. a series of epic events

**University Interscholastic League
2022-23 Dictionary Skills Contest
Fall/Winter Test — Grades 7 & 8**

Answer Key

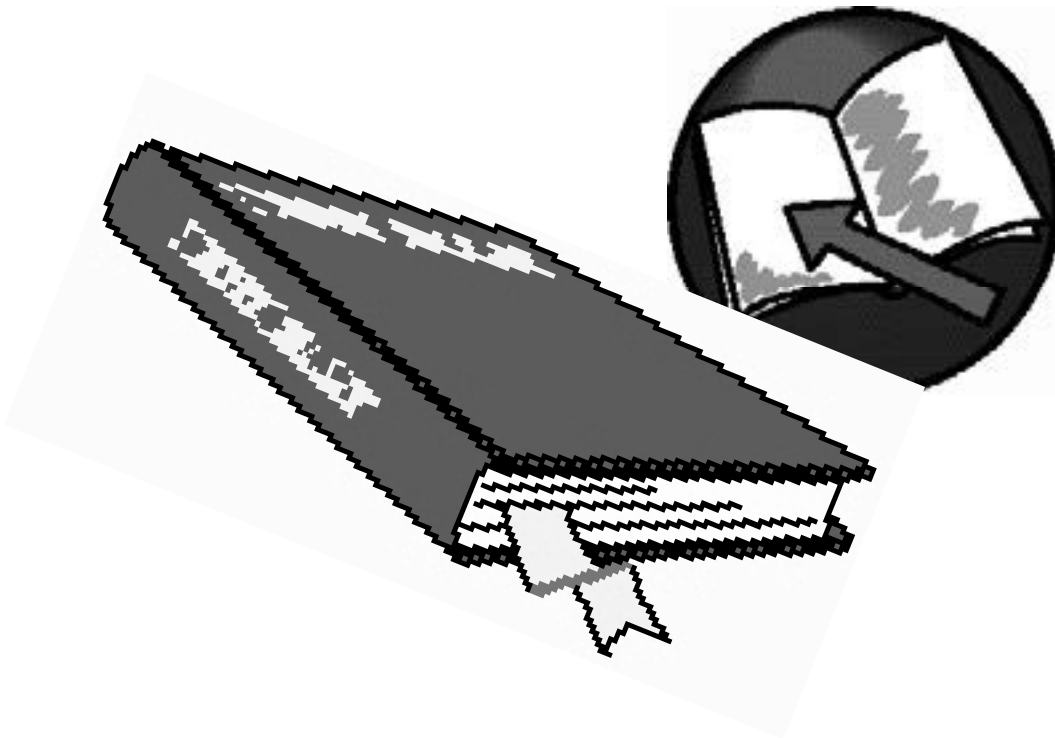
- | | |
|-------|-------|
| 1. C | 21. D |
| 2. D | 22. A |
| 3. C | 23. D |
| 4. A | 24. A |
| 5. C | 25. D |
| 6. B | 26. C |
| 7. C | 27. A |
| 8. B | 28. C |
| 9. B | 29. B |
| 10. A | 30. A |
| 11. D | 31. C |
| 12. B | 32. C |
| 13. B | 33. D |
| 14. C | 34. E |
| 15. C | 35. B |
| 16. C | 36. A |
| 17. A | 37. G |
| 18. D | 38. H |
| 19. C | 39. F |
| 20. C | 40. C |

SPRING DISTRICT 2022-2023

A+ ACADEMICS



University Interscholastic League



Dictionary Skills

grades 7 & 8

**DO NOT OPEN TEST
UNTIL TOLD TO DO SO**

**University Interscholastic League
2022-23 Dictionary Skills Contest
Spring District Test — Grades 7 & 8**

1. Jai alai is a type of what?
A. Sport
B. Plant
C. Gem
D. Measurement
2. Which of the following authors has a dieresis in their name?
A. J.R.R. Tolkien
B. Charlotte Brontë
C. Gabriel García Márquez
D. Jean-Paul Sartre
3. To be lachrymose is to be _____?
A. Cheerful
B. Sickly
C. Irritable
D. Tearful
4. A fricassee is served with what kind of sauce?
A. Brown gravy
B. Barbecue sauce
C. White sauce
D. Sour cream
5. Which of the following is measured in roentgens?
A. Carbon dioxide
B. Radiation
C. Ozone
D. Water salinity
6. Someone who studies mycology studies what type of life?
A. Bacteria
B. Parasites
C. Fungi
D. Viruses
7. Where could you find a topiary?
A. Hospital
B. Classroom
C. Office
D. Garden
8. In Ancient Greek myths, the afterlife was known as _____?
A. Ecclesia
B. Elysium
C. Edamame
D. Elastane
9. Galena is a type of ore used to make _____?
A. Diamonds
B. Aluminum
C. Lead
D. Gold
10. Quinine can be turned into what kind of drink?
A. Tonic water
B. Fruit juice
C. Cola
D. Coffee

11. Which animal order does the nutria belong to?
 A. Rodents
 B. Carnivores
 C. Primates
 D. Amphibians
12. If someone commits larceny, they have committed _____?
 A. Arson
 B. Theft
 C. Fraud
 D. Vandalism
13. Where would an abalone be found?
 A. Ocean
 B. Forest
 C. Tundra
 D. Desert
14. If someone has a periodontal disease, their _____ is affected?
 A. Skin
 B. Hair
 C. Tooth
 D. Fingernail
15. Which of the following situations illustrates a quibble?
 A. A mother giving birth to her child
 B. A man tending to a garden
 C. A couple having an argument
 D. A nurse assisting a patient
16. Which of the following is NOT a synonym of bellwether?
 A. Leader
 B. Trendsetter
 C. Follower
 D. Pioneer
17. Philharmonic is another way of saying _____?
 A. Ocarina
 B. Orchestra
 C. Obtuse
 D. Occident
18. A dramatist writes what kind of literature?
 A. Stage plays
 B. Novels
 C. Biographies
 D. Magazine articles
19. To shake involuntarily is to _____?
 A. Treble
 B. Tremble
 C. Trespass
 D. Trellis
20. What does someone who is wan look like?
 A. Muscular
 B. Tall
 C. Sickly
 D. Young
21. To put the kibosh on something is to _____ it?
 A. Improve
 B. Stop
 C. Decorate
 D. Clean

22. At what event could you potentially hear a requiem?
 A. A wedding
 B. A birthday
 C. A funeral
 D. A sporting event
23. Someone who works as a roustabout primarily does what kind of work?
 A. Construction
 B. Education
 C. Food service
 D. Scientific research
24. In chemistry, what is the process in which substances move from a higher concentration to a lower concentration?
 A. Difference
 B. Differential
 C. Diffusion
 D. Diffluence
25. Which of the following words contains a diphthong?
 A. Man
 B. Out
 C. Car
 D. Pen
26. Which of these businesses may use usury when dealing with clients/guests?
 A. Banks
 B. Restaurants
 C. Doctor's offices
 D. Dry cleaners
27. A bungalow is a type of what kind of building?
 A. House
 B. Office
 C. Greenhouse
 D. Garage
28. To vacillate between two options is to _____?
 A. Favor one strongly
 B. Not be able to decide
 C. Dislike both options
 D. Make a quick decision
29. Which of the following foods could be considered pungent?
 A. Apple
 B. Beans
 C. Cheese
 D. Doughnut
30. What kind of shape is a rhombus?
 A. A parallelogram
 B. A circle
 C. A cube
 D. A pyramid
31. In order to create wine, grapes must be _____?
 A. Ferreted
 B. Fermented
 C. Fertilized
 D. Felted
32. In the following sentence, identify the direct object: They built a house for her.
 A. They
 B. Her
 C. Built
 D. House

- | | |
|---------------------|---|
| _____ 33. mercurial | A. the office of a caliph |
| _____ 34. longitude | B. a tricky deceitful fellow |
| _____ 35. unctuous | C. harmless |
| _____ 36. innocuous | D. relating to tailored clothes |
| _____ 37. knave | E. smug, ingratiating |
| _____ 38. cerebral | F. intellectual |
| _____ 39. caliphate | G. characterized by unpredictable changes |
| _____ 40. sartorial | H. measurement of the globe |

**University Interscholastic League
2022-23 Dictionary Skills Contest
Spring District Test — Grades 7 & 8**

Answer Key

- | | |
|-------|-------|
| 1. A | 21. B |
| 2. B | 22. C |
| 3. D | 23. A |
| 4. C | 24. C |
| 5. B | 25. B |
| 6. C | 26. A |
| 7. D | 27. A |
| 8. B | 28. B |
| 9. C | 29. C |
| 10. A | 30. A |
| 11. A | 31. B |
| 12. B | 32. D |
| 13. A | 33. G |
| 14. C | 34. H |
| 15. C | 35. E |
| 16. C | 36. C |
| 17. B | 37. B |
| 18. A | 38. F |
| 19. B | 39. A |
| 20. C | 40. D |



Editorial Writing Evaluation Sheet

contestant #

In order to make this a complete learning experience, judges are asked to complete the evaluation sheet for students.

	FAIR	GOOD	EXCELLENT
The situation or problem is explained in the first two or three paragraphs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The writer takes an obvious stance in the first few paragraphs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The writer supports the stance through specific examples.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The writer presents a logical solution or conclusion.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What were the strong points of the editorial?

What were the weak points of the editorial?

What suggestions do you have for improvement?

Judge's Signature _____



Editorial Writing

A+ Invitational • 2022-2023

You are a reporter for the Leaguetown Press, the student newspaper of Leaguetown Middle School. From the given information, write an editorial as you would for the middle school newspaper. Remember that as an editorial writer you should support or oppose policy or action; you should not sermonize.

You have 45 minutes.

Do not write your name or the name of your school on this sheet or entry. Put your number in the upper right corner of each page of your entry.

STATEMENT OF SITUATION

Leaguetown Middle School is located in Central Texas and has an enrollment of 455 students in grades 6, 7 and 8. A survey by the American Psychological Association found that nearly half of all teens — 45 percent — said they were stressed by school pressures. After attending a Department of Education “Stress-Free” seminar, guidance counselor Kristie Harris has proposed the creation of a “safe space” for students in an empty Art classroom near the front office.

This room would be staffed in rotation with Harris and school psychologist, Asha Garland. Over the summer, Harris and Garland traveled to Fresno, California to visit a school that created a safe space for students. The school has already seen a decrease in students’ stress levels and an increase in classroom participation.

“Plenty of schools have created a social-emotional safe space on-campus for their students to go to if they are feeling stressed or overwhelmed,” Kristie Harris said. “The classroom we want to use has been out of use since I started working here in 2016. I hope we can repurpose that space into something really special for our students.”

Harris and Garland have already collected donations from teachers and parents in the district who donated items such as art supplies, calming sensory toys, board games, and books to furnish the space. Students will be able to receive counseling, unwind with activities, mediate issues with their peers, or meditate in this room.

“I already know the kids are going to take advantage of this program,” math teacher Steven Seegel said. “I already have such limited time to teach these kids, and now students are going to use this room as an excuse to cut class. The space used to be an art classroom before budget cuts. Why don’t we just reinstate art classes again?”

The safe space would be open for drop-ins before school and during lunch. Students can be referred to the room by teachers and administrators throughout the school day.

Harris and Garland will present their plan at a board meeting this Thursday. The board will either pass or reject this proposal.

You are writing an issue of The Press that will be distributed on the Tuesday before the scheduled meeting.

STANCES

Supporting:

The creation of an on-campus safe space would allow students to decompress, talk to an adult, or help solve issues with their peers. The program will cost the school next to nothing since most of the furnishings have been donated already. Students will only be able to go during the day if they are referred to by a teacher, so it won’t be a major distraction throughout the day.

Opposing

The safe space will be a distraction in the classrooms as many students will ask their teachers to go throughout the day. It is unnecessary because both Harris and Garland already have offices that are open to students throughout the school day. The classroom was originally for art classes before budget cuts in 2015, so if the school has extra money to spare, it should go to reinstating art classes.

UIL Editorial Writing Contest • A+ Invitational • 2022-2023

(Distribute this sheet to judges prior to judging.)

JUDGING INSTRUCTIONS

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Remember that for purposes of the contest these students go to Leaguetown Middle School. Contestants should not have to specify Leaguetown Middle School, because everyone reading the school paper knows where they go to school. Also, when they refer to the school board they do not have to say "Leaguetown School Board." Again, they know in what city they live.

Judging criteria has been developed to help you score the papers. The criteria are intended to help you evaluate the writing, not as a control

over your background in editorial writing or the writing process.

SAMPLE EDITORIAL

The school board will hear a proposal by guidance counselor Kristie Harris on Thursday for the repurposing of an old classroom into a social-emotional safe space for students.

The school board should reject the proposal and allocate funds elsewhere.

The proposed classroom for the safe space would be in an old art classroom. This classroom became obsolete in 2015 because of budget cuts, when the art program was cut. The school board should focus on funding the art program again so students can take art classes again.

The school psychologist and guidance counselor already have offices where students can come and talk to them. Moving them into a bigger space will not make that much of a difference.

Students may try to take advantage of the safe space and it can become irritating for teachers when students are constantly asking to leave class to go to the safe space. Since the safe space is only fully open before school and during lunch, it will probably get really crowded in there during those times.

The school board should not repurpose the classroom into a safe space. Instead, they should take the necessary steps to reinstating the art program.



Editorial Writing

You are a reporter for the Leaguetown Press, the student newspaper of Leaguetown Middle School. From the given information, write an editorial as you would for the middle school newspaper. Remember that as an editorial writer you should support or oppose policy or action; you should not sermonize.

You have 45 minutes.

Do not write your name or the name of your school on this sheet or entry.

Put your number in the upper right corner of each page of your entry.

STATEMENT OF SITUATION

Leaguetown Middle School is located in Central Texas and has an enrollment of 2,700 students in grades 6, 7 and 8.

Two years ago, Leaguetown ISD began providing free lunches to all students through the National School Lunch Program, designed to help students whose families are affected by food insecurity. Approximately 2,000 students daily participate in the program, while the remainder of the student population brings lunch. The students who bring their own lunch do so for a variety of reasons, including food allergies and a preference for vegetarian and vegan meals.

On Thursday, the district announced via social media that five Leaguetown teachers had been terminated after a three-day investigation showed that they had been accepting free school lunches from students who did not plan to eat them since they had brought their own lunch. According to school superintendent Rodney Braxton, the investigation showed that the practice occurred throughout the school year and was captured on district security cameras.

“Our investigation showed that the theft of these meals was happening daily and has been happening for months,” Braxton said. “When confronted, the teachers admitted they were eating lunches intended for their students.”

The National School Lunch Program is intended to provide lunches for students of the district only and employees are not eligible. According to school administration, the district could be fined or even have their enrollment in the program terminated due to the misuse. The district also plans to pursue criminal charges.

“The act of receiving federal free lunches which one is not entitled to is fraudulent behavior, abuse of official capacity, and theft of federal funds, carrying with it criminal consequences,” campus principal Samantha Hendrickson said. “We really have no choice.”

The teachers, however, claim there is more to the story. They insist that they did not force or even ask the students to bring them their lunches, maintaining the students saw that the teachers were often too busy to take a lunch break and brought them their tray. The employees all contend that they did not know it was against federal regulations and assumed the lunches would just be tossed if they were not eaten.

“Why would we put our careers and our certificates on the line over a school lunch that would cost us \$3.00? That doesn’t make sense,” teacher Angela Velaro said. “It’s really just a misunderstanding.”

Many of the parents are siding with the teachers and are angry the district terminated employees who were valuable assets to the campus.

“It is absurd that these educators have lost their jobs and are being threatened with criminal charges,” parent Bill Everston said. “My son is one of the students who brought his lunch to his teacher some days, and he says it was always his idea. He was just trying to be nice.”

A group of parents has started a petition asking that the teachers be reinstated to their positions. They plan to attend the regularly-scheduled school board meeting this Wednesday to speak and present their signatures. You are writing for the issue of The Press to be distributed the Tuesday before the meeting.

STANCES

Supporting the decision to terminate the teachers

These educators all sign a form at the beginning of each school year that says they have read and promised to abide by the employee handbook. The cost of school lunches for employees is clearly stated in the handbook, as are the rules of the federal program. These employees knew what they were doing and that it was against the rules.

Supporting the petition to reinstate the teachers

Teachers have little time to eat meals during the school day, often spending their lunch periods tutoring students, grading papers, or completing other duties. The meals would have been thrown away if the students had not received them, and once the students got their tray, it really should not matter what they do with it or who eats it. So much of the food on student trays is thrown away, anyway. Why shouldn’t someone eat it?

UIL Editorial Writing Contest • A+ Fall/Winter • 2022-2023

(Distribute this sheet to judges prior to judging.)

JUDGING INSTRUCTIONS

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Judging criteria has been developed to help you score the papers. The criteria are intended to help you evaluate the writing, not as a control over your background in editorial writing or the writing process.

SAMPLE EDITORIAL

A group of parents will argue at this week's school board meeting for the reinstatement of five teachers who were caught eating free school lunches, given to them by students who were not eating them.

The teachers were fired after a three-day investigation, where they caught them taking the food from students on security cameras. The school district is also pursuing criminal charges against the educators.

The educators should be reinstated because the food would have ultimately gone to waste if they had not eaten it.

Two years ago, when the school started offering free lunch for all students, many students still brought their own lunch. Students who brought their own lunch then began offering their school lunch to their teachers. The teachers were accepting a kind gesture from their students.

The teachers also had no malintention to steal or cheat the system. If they had known that accepting these lunches would get them fired, they wouldn't have done so. There is no reason to press charges on the teachers as it is an obvious mistake on their part.

The food that the teachers were eating would have probably been thrown away by students anyway, contributing to more trash and food waste. Feeding hard-working teachers seems like a better use for the food than rotting in a trash can.

The school board should reinstate these teachers and recognize this whole situation as a simple mistake, rather than a criminal plot against the school.



Editorial Writing

A+ Spring District • 2022-2023

You are a reporter for the Leaguetown Press, the student newspaper of Leaguetown Middle School. From the given information, write an editorial as you would for the middle school newspaper. Remember that as an editorial writer you should support or oppose policy or action; you should not sermonize.

You have 45 minutes.

Do not write your name or the name of your school on this sheet or entry. Put your number in the upper right corner of each page of your entry.

STATEMENT OF SITUATION

Leaguetown Middle School is located in West Texas and has an enrollment of 342 students in grades 6, 7 and 8.

Last week a teacher was accused of disciplining students in her classroom with a ringing noise generated by her cell phone. Students say the sound was very hard to listen to and that their teacher, Lydia Clayborn, kept playing it even after students begged her to stop.

“When Mrs. Clayborn put on the ringing noise, everyone was covering their ears,” one student said. “It was torture. My friend started crying and two students left the room. Mrs. Clayborn finally turned it off, but then she played it again two more times that day.”

Clayborn admitted she played the high-pitched frequency because she had been having trouble with her students talking when they should be working. She got the idea after reading an article about high-pitched frequencies kids can hear but some adults cannot. She searched online and found several samples of the frequency, which she downloaded and saved on her phone.

“All I wanted to do was persuade my students to work quietly,” Clayborn said. “Ever since the pandemic, their behavior is just not the same as it used to be. I never had trouble with classroom management before, but this year the students have simply been out of control.”

Parents of the students are upset and are asking superintendent Barry Leopold to suspend Clayborn or to discipline her in some way.

“It is ridiculous that someone who works with children every day and who is trained to handle students in the classroom would resort to such tactics just because the students are talking too much,” parent Cindy Seawell said. “She needs to be removed from the classroom immediately. Our children could have had their hearing permanently damaged.”

According to local physician Randall Harriman, high frequency sound causes two types of health effects: hearing loss from extended exposure and subjective effects which may already occur after a few minutes such as headache, tinnitus, fatigue, dizziness and nausea.

“These high-pitched frequencies can cause problems both in the short-term and the long-term,” Harriman said. “Several of the students involved did complain later of headaches, but more concerning is the possible effect to their long-term hearing.”

Leopold said that no plans have been made at this time to suspend or terminate Clayborn, but he has agreed to meet with the parents next Thursday to hear their concerns. You are writing for an issue of The Press that will be distributed on the Tuesday before the scheduled meeting.

STANCES

Supporting the decision to suspend the teacher

Teachers are expected to be in control of their classrooms and there are measures in place to deal with students who do not comply with the rules. If the teacher was having trouble with student behavior, she should have contacted her administrators for suggestions rather than taking such a drastic step. Several of these students are now afraid to be in her classroom and they may have hearing damage that will not be revealed for years.

Supporting the decision to allow the teacher to remain in the classroom

The teacher made a mistake but had no intent to harm the students. The article she read did not discuss any of the possible negative health effects, and students often use similar sounds to camouflage their use of cell phones in the classroom. Suspending or terminating the teacher is far too harsh of a consequence for an innocent mistake.

UIL Editorial Writing Contest • A+ Spring District • 2022-23

(Distribute this sheet to judges prior to judging.)

JUDGING INSTRUCTIONS

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SAMPLE EDITORIAL

Superintendent Barry Leopald will hear from concerned parents Thursday following an incident in which teacher Lydia Clayborn played a high-frequency ringing noise in her classroom on her phone, causing great discomfort for her students.

Superintendent Leopald should suspend Clayborn for putting children through emotional and physical distress.

Classroom management has been a struggle for teachers since going back to school after the pandemic, however, Clayborn could have reached out to her administrators or co-workers for help, before resorting to high-pitched noises. If Clayborn still wanted to use the noise in the classroom, she should have cleared it with her administrators first.

Students begged Clayborn to turn off the noise and very clearly expressed their discomfort through crying, covering their ears, or walking out of the classroom. This reaction created an even greater distraction from learning, rather than helping the situation. However, Clayborn still chose to play the sound again later that day.

Many students suffered from headaches after the incident, but the long-term effects of the sound on student's hearing is still unknown. Clayborn potentially put students in harm's way and they may suffer the consequences later on in life.

Children should feel safe in school and Clayborn's actions have left many children feeling reluctant to go back to her class. The superintendent should suspend Clayborn for her drastic actions that made a bad situation even worse.



Impromptu Speaking

EVALUATION SHEET

INSTRUCTIONS

Contestants should be evaluated and ranked based on effectiveness of delivery, organization of ideas and the overall impression of the speech. Students draw three topics and have three minutes to prepare a speech. The maximum time limit for speaking is five minutes. There is no minimum time limit. Topics may be serious or humorous in nature. Note cards may not be used during the presentation. Please make your comments using language understandable to the contestant. Students and instructors appreciate constructive narrative comments. Please do not confer with other judges before ranking students. Judging decisions are an individual responsibility.

Speaker Number _____

Speaker Name _____

Section _____

Topic _____

CRITERIA

Evaluate the contestant in each category. Do NOT total these numbers to determine rank in the round. They are only designed to give the contestant an indication of strengths and weaknesses.

QUESTION	NEEDS WORK	GOOD	SUPERIOR		
1. Was the presentation organized clearly and effectively?	1	2	3	4	5
2. Was the speaker's delivery smooth and articulate?	1	2	3	4	5
3. Did the student have adequate eye contact?	1	2	3	4	5
4. Did the student have a creative approach to the topic?	1	2	3	4	5
5. Was the speaker poised and confident?	1	2	3	4	5
6. Did the speaker have vocal variety?	1	2	3	4	5
7. Was the speaker interested and enthusiastic?	1	2	3	4	5
8. Did the speaker communicate with the audience?	1	2	3	4	5

WRITTEN EVALUATION

Comments should be constructive and supportive.

Judge's signature _____



A+ IMPROMPTU SPEAKING TOPICS
2022-2023 Invitational
PRELIMINARY ROUND

1. The best food I ever ate...
2. If I could pause time...
3. If I had a movie made about my life...
4. If I were on a deserted island...
5. If I woke up famous tomorrow...
6. The best field trip I ever went on...
7. My dream job is...
8. If I could turn into an animal...
9. The best kind of dessert is...
10. If I could live in a fictional universe...
11. If I were a cartoon character...
12. If I could go to space...
13. My outfit is never complete without...
14. My favorite sport to watch is...
15. If I could go to any country, I would go to...

A+ IMPROMPTU SPEAKING TOPICS
2021-2022 Invitational
PRELIMINARY ROUND

CUT APART FOR TOPIC SELECTION



2022-23 Invitational– Impromptu Prelims

1. The best food I ever ate...



2022-23 Invitational– Impromptu Prelims

2. If I could pause time...



2022-23 Invitational– Impromptu Prelims

3. If I had a movie made about my life...



2022-23 Invitational– Impromptu Prelims

4. If I were on a deserted island...



2022-23 Invitational– Impromptu Prelims

5. If I woke up famous tomorrow...



2022-23 Invitational– Impromptu Prelims

6. The best field trip I ever went on...



2022-23 Invitational– Impromptu Prelims

7. My dream job is...



2022-23 Invitational– Impromptu Prelims

8. If I could turn into an animal...



2022-23 Invitational– Impromptu Prelims

9. The best kind of dessert is...



2022-23 Invitational– Impromptu Prelims

10. If I could live in a fictional universe...



2022-23 Invitational– Impromptu Prelims

11. If I were a cartoon character...



2022-23 Invitational– Impromptu Prelims

12. If I could go to space...



2022-23 Invitational– Impromptu Prelims

13. My outfit is never complete without...



2022-23 Invitational– Impromptu Prelims

14. My favorite sport to watch is...



2022-23 Invitational– Impromptu Prelims

15. If I could go to any country, I would go to...





A+ IMPROMPTU SPEAKING TOPICS
2022-2023 Invitational
FINAL ROUND

1. If I could learn another language...
2. One thing I wish I had an unlimited supply of...
3. Social media...
4. If I ran my own business...
5. If I could make a documentary...
6. When it comes to kids my age, my teacher should know...
7. If cars were never invented...
8. I wish everyone knew about...
9. Making books into movies is good and bad because...
10. The scariest thing that ever happened to me...
11. Responsibility means...
12. Creativity means...
13. If I could paint a mural...
14. One thing that worries me about the future...
15. If kids could vote...

A+ IMPROMPTU SPEAKING TOPICS
2022-2023 Invitational
FINAL ROUND

CUT APART FOR TOPIC SELECTION



2022-23 Invitational– Impromptu Finals

1. If I could learn another language...



2022-23 Invitational– Impromptu Finals

2. One thing I wish I had an unlimited supply of...



2022-23 Invitational– Impromptu Finals

3. Social media...



2022-23 Invitational– Impromptu Finals

4. If I ran my own business...



2022-23 Invitational– Impromptu Finals

5. If I could make a documentary...



2022-23 Invitational– Impromptu Finals

6. When it comes to kids my age, my teacher should know...



2022-23 Invitational– Impromptu Finals

7. If cars were never invented...



2022-23 Invitational– Impromptu Finals

8. I wish everyone knew about...



2022-23 Invitational– Impromptu Finals

9. Making books into movies is good and bad because...



2022-23 Invitational– Impromptu Finals

10. The scariest thing that ever happened to me...



2022-23 Invitational– Impromptu Finals

11. Responsibility means...



2022-23 Invitational– Impromptu Finals

12. Creativity means...



2022-23 Invitational– Impromptu Finals

13. If I could paint a mural...



2022-23 Invitational– Impromptu Finals

14. One thing that worries me about the future...



2022-23 Invitational– Impromptu Finals

15. If kids could vote...





A+ IMPROMPTU SPEAKING TOPICS
2022-2023 Fall/Winter District
PRELIMINARY ROUND

1. Something I could talk about for hours is...
2. If I could have dinner with anybody...
3. If animals could talk...
4. When I'm older, I want to live in...
5. If I could control the weather...
6. If I could keep any animal as a pet...
7. If I could write a song...
8. The best Halloween I ever had...
9. Sometimes I daydream about...
10. The time I laughed the hardest was...
11. When I go to a restaurant, I always order...
12. My favorite video game is...
13. If I wrote a book...
14. If I had super strength...
15. My earliest memory is...

A+ IMPROMPTU SPEAKING TOPICS
2022-2023 Fall/Winter District
PRELIMINARY ROUND

CUT APART FOR TOPIC SELECTION



2022-23 Fall/Winter– Impromptu Prelims

1. Something I could talk about for hours is...



2022-23 Fall/Winter– Impromptu Prelims

2. If I could have dinner with anybody...



2022-23 Fall/Winter– Impromptu Prelims

3. If animals could talk...



2022-23 Fall/Winter– Impromptu Prelims

4. When I'm older, I want to live in...



2022-23 Fall/Winter– Impromptu Prelims

5. If I could control the weather...



2022-23 Fall/Winter– Impromptu Prelims

6. If I could keep any animal as a pet...



2022-23 Fall/Winter– Impromptu Prelims

7. If I could write a song...



2022-23 Fall/Winter– Impromptu Prelims

8. The best halloween I ever had...



2022-23 Fall/Winter– Impromptu Prelims

9. Sometimes I daydream about...



2022-23 Fall/Winter– Impromptu Prelims

10. The time I laughed the hardest was...



2022-23 Fall/Winter– Impromptu Prelims

11. When I go to a restaurant, I always order...



2022-23 Fall/Winter– Impromptu Prelims

12. My favorite video game is...



2022-23 Fall/Winter– Impromptu Prelims

13. If I wrote a book...



2022-23 Fall/Winter– Impromptu Prelims

14. If I had super strength...



2022-23 Fall/Winter– Impromptu Prelims

15. My earliest memory is...





A+ IMPROMPTU SPEAKING TOPICS
2022-2023 Fall/Winter District
FINAL ROUND

1. If I were a billionaire...
2. The hardest part about being a kid...
3. If I could change one thing about my school...
4. When I go to college, I want to major in...
5. If I won an award, it would be for...
6. If I was the principal of my school...
7. Leadership means...
8. I hope high school is...
9. The most tired I've ever been...
10. Advice I have for kids starting middle school...
11. The most interesting person I know...
12. The nicest thing someone ever did for me was...
13. The animal I know the most about is...
14. When I get my driver's license...
15. I wish I could be more like...

A+ IMPROMPTU SPEAKING TOPICS
2022-2023 Fall/Winter District
FINAL ROUND

CUT APART FOR TOPIC SELECTION



2022-23 Fall/Winter– Impromptu Finals

1. If I were a billionaire...



2022-23 Fall/Winter– Impromptu Finals

2. The hardest part about being a kid...



2022-23 Fall/Winter– Impromptu Finals

3. If I could change one thing about my school...



2022-23 Fall/Winter– Impromptu Finals

4. When I go to college, I want to major in...



2022-23 Fall/Winter– Impromptu Finals

5. If I won an award, it would be for...



2022-23 Fall/Winter– Impromptu Finals

6. If I was the principal of my school...



2022-23 Fall/Winter– Impromptu Finals

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2022-23 Fall/Winter– Impromptu Finals

8. I hope high school is...



2022-23 Fall/Winter– Impromptu Finals

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2022-23 Fall/Winter– Impromptu Finals

10. Advice I have for kids starting middle school...



2022-23 Fall/Winter– Impromptu Finals

11. The most interesting person I know...



2022-23 Fall/Winter– Impromptu Finals

12. The nicest thing someone ever did for me was...



2022-23 Fall/Winter– Impromptu Finals

13. The animal I know the most about is...



2022-23 Fall/Winter– Impromptu Finals

14. When I get my driver's license...



2022-23 Fall/Winter– Impromptu Finals

15. I wish I could be more like...





A+ IMPROMPTU SPEAKING TOPICS
2022-2023 Spring District
PRELIMINARY ROUND

1. The best game to play with friends is...
2. My favorite month of the year...
3. The snack I always must have...
4. If I could make a new Olympic sport...
5. If I met George Washington...
6. If I ran a restaurant...
7. The perfect birthday would be...
8. My favorite outfit...
9. If my parents let me do the grocery shopping...
10. If I had to give up one of my five senses...
11. If I met a werewolf...
12. If I could go back in time...
13. Something that makes me sad is...
14. If my dog could use the internet...
15. My favorite vegetable...

A+ IMPROMPTU SPEAKING TOPICS
2022-2023 Spring District
PRELIMINARY ROUND

CUT APART FOR TOPIC SELECTION



2022-23 Spring– Impromptu Prelims

1. The best game to play with friends is...



2022-23 Spring– Impromptu Prelims

2. My favorite month of the year...



2022-23 Spring– Impromptu Prelims

3. The snack I always must have...



2022-23 Spring– Impromptu Prelims

4. If I could make a new Olympic sport...



2022-23 Spring– Impromptu Prelims

5. If I met George Washington...



2022-23 Spring– Impromptu Prelims

6. If I ran a restaurant...



2022-23 Spring– Impromptu Prelims

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2022-23 Spring– Impromptu Prelims

8. My favorite outfit...



2022-23 Spring– Impromptu Prelims

9. If my parents let me do the grocery shopping...



2022-23 Spring– Impromptu Prelims

10. If I had to give up one of my five senses...



2022-23 Spring– Impromptu Prelims

11. If I met a werewolf...



2022-23 Spring– Impromptu Prelims

12. If I could go back in time...



2022-23 Spring– Impromptu Prelims

13. Something that makes me sad is...



2022-23 Spring– Impromptu Prelims

14. If my dog could use the internet...



2022-23 Spring– Impromptu Prelims

15. My favorite vegetable...





A+ IMPROMPTU SPEAKING TOPICS
2022-2023 Spring District
FINAL ROUND

1. If I was an airplane pilot...
2. Honesty means...
3. My favorite summer memory...
4. In the future, school will be...
5. The thing I miss most about being a kid...
6. If I never had to sleep...
7. The best teacher I ever had...
8. If there were life on Mars...
9. If I could pass one law...
10. One thing I'll never forget...
11. One way I like to serve my community...
12. I wish my teacher would teach me about...
13. I'll always regret...
14. If I could be an expert about one subject...
15. When my parents were my age...

A+ IMPROMPTU SPEAKING TOPICS
2022-2023 Spring District
FINAL ROUND

CUT APART FOR TOPIC SELECTION



2022-23 Spring– Impromptu Finals

1. If I was an airplane pilot...



2022-23 Spring– Impromptu Finals

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2022-23 Spring– Impromptu Finals

3. My favorite summer memory...



2022-23 Spring– Impromptu Finals

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2022-23 Spring– Impromptu Finals

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2022-23 Spring– Impromptu Finals

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2022-23 Spring– Impromptu Finals

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2022-23 Spring– Impromptu Finals

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2022-23 Spring– Impromptu Finals

9. If I could pass one law...



2022-23 Spring– Impromptu Finals

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2022-23 Spring– Impromptu Finals

11. One way I like to serve my community...



2022-23 Spring– Impromptu Finals

12. I wish my teacher would teach me about...



2022-23 Spring– Impromptu Finals

13. I'll always regret...



2022-23 Spring– Impromptu Finals

14. If I could be an expert about one subject...



2022-23 Spring– Impromptu Finals

15. When my parents were my age...



CONTESTANT NUMBER:

FOR GRADER USE ONLY

Score Test Below:

_____ out of 75. Initials _____

_____ out of 75. Initials _____

Papers contending to place:

_____ out of 75. Initials _____



**University Interscholastic League
A+ Listening Contest • Answer Sheet**

Write your contestant number in the upper right corner, and circle your grade below.

Circle Grade Level : 5 6 7 8

- 1. A B C D
- 2. A B C D
- 3. A B C D
- 4. A B C D
- 5. A B C D
- 6. A B C D
- 7. A B C D
- 8. A B C D
- 9. A B C D
- 10. A B C D
- 11. A B C D
- 12. A B C D
- 13. A B C D

- 14. A B C D
- 15. A B C D
- 16. A B C D
- 17. A B C D
- 18. A B C D
- 19. T F
- 20. T F
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- 22. T F
- 23. T F
- 24. T F
- 25. T F

UIL LISTENING CONTEST - GRADES 7 & 8 INVITATIONAL MEET 2022-2023

Contest Script – “The History of Play-Doh”

Everyone has childhood memories of favorite playthings. Some are unique to situations and families. However, chances are, if you mention the words Play-Doh, your friend will know exactly what you mean. Think about it. My guess is that right now you have a mental image of a small yellow can with a colorful lid. You might even have vague memories of the colors, textures and even smells associated with it. How did this modeling compound become such a popular children’s product? Let’s find out the history of Play-Doh.

1:00

Before Play-Doh became Play-Doh, it was actually marketed and sold for a completely different purpose. In the late 1920s, Cleo McVicker began working for the Kutol Products soap company based in Cincinnati, Ohio. Although it had been founded in 1912, it was still a small company, and it began having financial difficulties. The company was close to going out of business when, in 1933, Cleo negotiated a contract with the Kroger company to manufacture wallpaper cleaner to be marketed and sold in their grocery stores. Although Kutol Products had never made wallpaper cleaner before Cleo and his brother Noah developed a winning formula. Their new, clay-like compound was made from water, salt, and flour. It was non-toxic and easy to use. This new product was sold successfully for the next 20 years. Eventually, however, as lifestyles and homes began to change, there was less need for a product to remove soot from wallpaper. By the early 1950s, sales of Kutol Products wallpaper cleaner began to plummet. After World War II, coal-based home furnaces began to be replaced by oil and gas ones. This reduced the amount of soot in the air and on the walls of their home. It was great for the lungs and the environment, but bad for Kutol. The company began to flounder again.

2:00

After Cleo died in 1949, his wife Ima hired their son Joseph McVicker and son-in-law Bill Rodenbaugh to run the business. In 1955, Kay Zufall, a schoolteacher who was McVicker’s sister-in-law convinced him to reimagine their product as something children could play with. She gave the wallpaper cleaner to her students who were happy to use

the pliable material for creating and modeling. After seeing the smiles on the children's faces, Joseph returned to headquarters to make plans to repurpose their product.

In 1956, Joseph and his uncle Noah McVicker established the Rainbow Crafts Company. Upon the suggestion of Kay Zufall, Rainbow Crafts renamed the product Play-Doh and marketed it to elementary schools in the greater Cincinnati, Ohio, area. The Woodward & Lothrop Department Store in Washington DC discovered the product and began selling it in 1956. Noah and Joseph McVicker applied for a patent for Play-Doh in 1958.

3:00 Originally, Play-Doh came in boxes that weighed 1½ pounds and was an off-white color. However, by 1957, the company offered red, yellow, and blue Play-Doh in gallon cans. This proved to be far too large, and soon the Rainbow Crafts Company began selling in eleven-ounce packages. Kutol Products continued to manufacture soap and other cleaners, but Rainbow Crafts Company, Inc., became the sole manufacturer of Play-Doh. At this point, Joseph wanted to market his product to a larger audience than just schools and daycares, but he did not have a large enough advertising budget. He had to think outside of the box. He introduced Play-Doh to Bob Keeshan, otherwise known to the television world as Captain Kangaroo. Captain Kangaroo was an American children's television series that aired weekday mornings on CBS from 1955 to 1984.

4:00 It was the longest running nationally broadcast children's television program of that era. Bob Keeshan played the part of Captain Kangaroo and based the show on the warm relationship that exists between grandparent figures and young children. Bob Keeshan loved Play-Doh and made a commitment with McVicker to use Play-Doh at least once a week on his show, and Rainbow Crafts would give him 3% of the overall sales. This brought Play-Doh nationwide attention. Of course, sales shot through the roof. Rainbow Crafts struggled to keep up with the overwhelming demand. In 1960, Rainbow Crafts decided to add accessories as part of the Play-Doh line. McVicker hired two engineers to design a product that would enhance the use of Play-Doh in multiple ways.

The result was the Fun Factory. When children (or adults) used the items in the Fun Factory, they were able to explore their imaginations. To use the fun factory, the user simply loaded Play-Doh into the plastic box, selected a shape from one of the two rails, and then press the lever to squeeze out a long stream of silly and fun shapes. The Fun

Factory was so popular that it is still sold today. Since 1960, the Fun Factory along with dozens of other accessories and playsets such as Animal Ark, Make a Meal Sub Shop and Dr. Drill & Fill were developed and sold. There was even a hair salon called Play-Doh Buzz and Cut. Newer sets include Play-Doh Crazy Cut Stylist, Play-Doh Ice Cream Truck, and Play-Doh Stamp and Cut though none of them are as successful as the original Fun Factory. By 1964, Rainbow Crafts was shipping more than one million cans of Play-Doh per year.

5:00

Finally, on January 26, 1965, the US Patent Office officially patented Play-Doh. That same year, General Mills purchased the Rainbow Crafts Company and all rights to Play-Doh. Six years later, Rainbow Crafts and Kenner Products, both owned by General Mills were merged. General Mills continued to manufacture Play-Doh until 1987 when Tonka Corporation purchased both Kenner and Rainbow Crafts. In 1991, the current producer of Play-Doh, Hasbro, purchased all rights to Play-Doh. According to *Fortune* magazine, Play-Doh has sold more than 3 billion cans since its debut in 1956. That's more than 700 million pounds! In fact, Hasbro wrote on the Play-Doh site that "Urban legend has it that if you took all of the Play-Doh compound created since 1956 and put it through the Play-Doh Fun Factory playset, you could make a snake that would wrap around the world 300 times."

6:00

Play-Doh was originally packaged with illustrations of children mainly because it was introduced as a children's toy. Packages also briefly contained the Play-Doh Pixie which was a tiny elf. However, in 1960 the elf was replaced by Play-Doh Pete. Play-Doh Pete was a cartoon boy who wore a smock and a beret. By 1992, Play-Doh Pete's beret was a signature blue, and his eyes were more human than cartoon. In 2000, his beret was replaced with a baseball cap. In 2003, Play-Doh Pete was retired after lasting for 42 years.

As a result of its huge popularity, Play-Doh was inducted into the Strong's National Toy Hall of Fame in 1998. The National Toy Hall of Fame at the Strong was established in 1998 and recognizes toys that have inspired creative play and enjoyed popularity over a sustained period. Play-Doh has definitely done that. Each year, the Toy Hall of Fame inducts new honorees and showcases both the new and historic versions of classic toys loved by generations of children. The Strong's Brian Sutton-Smith Library and Archives

of Play has approximately 40 trade catalogs and print advertisements ranging from 1964 through the present which represent Rainbow Crafts, Kenner, and Hasbro. In addition, there are more than 40 Play-Doh related articles found in their collection.

7:00 We know that even today, Play-Doh is a very popular creative outlet for children's imaginations. Although accidentally invented, it has grown into a worldwide franchise and influenced children for over 60 years. Although it was originally sold in the basic colors of blue, yellow, red, and white, it is now sold in many colors including Rose Red, Purple Paradise, Garden Green, and Blue Lagoon. There are also tints that include metallic and glittery elements. The recipe has gone through minor modifications over time. At one point, the amount of salt was reduced to prevent it from drying out as quickly. Play-Doh's manufacturer, Hasbro, says that the clay is primarily a mixture of water, salt and flour. A patent issued in 2004 by the US Patent office indicates that it is composed of water, starch, salt, a petroleum additive used as a lubricant, fragrance, color, several preservatives, a hardener, and a retrogradation inhibitor. Borax is also added to prevent mold from developing. Although it contains ingredients that are edible, because of the other ingredients, it is not intended to be eaten.

8:00 To celebrate the 50th anniversary of its use as a toy, in 2006, Hasbro created a Play-Doh perfume. Demeter Fragrance company created a fresh-out of the can aroma. It did not sell well but was marketed as a limited-edition fragrance inspired by Play-Doh's distinctive odor for "highly-creative people, who seek a whimsical scent reminiscent of their childhood. To preserve its proprietary pungency, Hasbro filed for trademark protection in 2017, claiming the product had "a unique scent formed through the combination of a sweet, slightly musky, vanilla-like fragrance, with slight overtones of cherry, and the natural smell of a salted, wheat-based dough." The company received the trademark on May 18, 2018.

In 2003, The Toy Industry Association placed Play-Doh into its "Century of Toys List" which contains the 100 most memorable and creative toys of the 20th century. What a remarkable journey from wallpaper cleaner to one of history's most iconic toys.

INVITATIONAL 2022-2023

A+ ACADEMICS



University Interscholastic League



Listening
grades 7 & 8

**DO NOT OPEN TEST
UNTIL TOLD TO DO SO**

UIL LISTENING CONTEST - GRADES 7/8
INVITATIONAL MEET 2022-2023

TEST

"The History of Play-Doh"

1. Who came up with the name "Play-Doh"?
A. Cleo McVicker
B. Bill Rosenbaugh
C. Kay Zufall
D. Ima McVicker
2. What was the original name of the company that first invented Play-Doh?
A. Kutol Products
B. Hasbro
C. Rainbow Crafts
D. Tonka
3. In what year did Joseph and Noah McVicker apply for a patent for Play-Doh?
A. 1955
B. 1958
C. 1961
D. 1964
4. Which Play-Doh accessory was the most successful?
A. Fun Factory
B. Dr. Fill & Drill
C. Ice Cream Truck
D. Buzz & Cut
5. Which of the following colors were not part of the original set of 4?
A. blue
B. yellow
C. red
D. green
6. What caused the sales of wallpaper cleaner to plummet after World War I?
A. The world economy was in a depression leaving people with little extra cash.
B. People began to replace their coal burning stoves with gas and oil ones.
C. Wallpaper had gone out of fad due to greater availability of colorful paints.
D. People celebrated the end of the war by replacing wallpaper instead of cleaning it.
7. In what year was The National Toy Hall of Fame at the Strong established?
A. 1967
B. 1998
C. 2003
D. 1964

8. Why is Borax added to Play-Doh?
- A. to give it a unique aroma
 - B. to keep it soft and pliable
 - C. to keep it from drying out
 - D. to prevent mold from growing
9. To celebrate the 50th anniversary of its use as a toy what new item was created?
- A. the Sock & Bop Living in the 50s Ice Cream Shop
 - B. a new color swirl container of 3 different colors
 - C. a perfume that smelled like a new container of Play-Doh
 - D. an accessory for the Fun Factory that created the number 50
10. In what year did Rainbow Crafts finally receive their patent? _____
- A. 1960
 - B. 1970
 - C. 1965
 - D. 1975
11. How large was the 1957 Play-Doh container?
- A. one gallon
 - B. 11 ounces
 - C. 1 cup
 - D. 32 ounces
12. Which of the following statements shows that Joseph McVicker was good at thinking outside of the box for creative answers?
- A. He invented a new use for an old product.
 - B. He found a way to advertise his product with only a small budget.
 - C. He hired two engineers to create accessories for his product.
 - D. He started a television show that used his product with children.
13. Who was Noah McVicker?
- A. Joseph's father
 - B. Joseph's brother
 - C. Joseph's uncle
 - D. Joseph's cousin
14. The National Toy Hall of Fame inducts toys that
- A. contain old and new versions that are loved by children
 - B. have been sold children for more than 20 years
 - C. have inspired creative play and been popular for a sustained period
 - D. generated more than a million dollars throughout their lifetime
15. Which of the following is not part of the patented recipe for Play-Doh?
- A. water
 - B. wheat flour
 - C. starch
 - D. lubricant

16. What percentage of sales did Bob Keeshan get from Rainbow Crafts?
A. 0% B. 1%
C. 2% D. 3%
17. Who placed Play-Doh into its "Century of Toys List" which contains the 100 most memorable and creative toys of the 20th century in 2003?
A. The Toy Industry Association B. Strong's Brian Sutton-Smith Library
C. The National Archives of Play D. The Toy Hall of Fame
18. How many years did Captain Kangaroo air on CBS?
A. 15 B. 26
C. 8 D. 29

True/False

19. After inventing Play-Doh, the original manufacturer halted work on soap and other cleaners and focused solely on the manufacturing of Play-Doh.
20. By 1964, Rainbow Crafts was shipping more than one million cans of Play-Doh per year.
21. After extensive research, Hasbro scientists determined that if you took all the Play-Doh compound created since 1956 and put it through the Play-Doh Fun Factory playset, you could make a snake that would wrap around the world 300 times.
22. Since its debut in 1956 more than 700 million pounds of Play-Doh have been created and sold.
23. Hasbro was granted a trademark on the scent of Play-Doh on May 18, 2018 due to competing companies using slightly musky, vanilla-like fragrance, with slight overtones of cherry, and the natural smell of a salted dough.
24. According to *Fortune* magazine, Play-Doh has sold more than 3 billion cans since its debut in 1956 which is more than 700 million pounds.
25. In 1933, Cleo negotiated a contract with the Kroger company to manufacture wallpaper cleaner to be marketed and sold in their grocery stores even though his company didn't have a wallpaper cleaner as one of their products.

UIL LISTENING CONTEST - GRADES 7/8
INVITATIONAL MEET 2022-2023

ANSWER KEY

"The History of Play-Doh"

- | | |
|-------|-----------|
| 1. C | 14. C |
| 2. A | 15. B |
| 3. B | 16. D |
| 4. A | 17. A |
| 5. D | 18. D |
| 6. B | 19. False |
| 7. B | 20. True |
| 8. D | 21. False |
| 9. C | 22. True |
| 10. C | 23. False |
| 11. A | 24. True |
| 12. B | 25. True |
| 13. C | |

UIL LISTENING CONTEST - GRADES 7 & 8 FALL/WINTER DISTRICT 2022-2023

Contest Script – “Canton Trade Days”

Texas is a pretty big state. Actually, it’s a very big state covering 268,596 square miles. So, knowing that, it makes sense that Texas would have really big events. Ever heard the saying, “Everything’s bigger in Texas”? Well, it’s not always true, but there is one thing that is definitely huge. The city of Canton holds the record for having the nation’s largest trade days event. It is called First Monday Trade Days, and it is quite an experience. Let’s find out what it’s all about.

1:00

Canton, Texas, was surveyed in the 1840s by a company of men under Dr. W.P. King. No settlement was made until 1850, when the town was laid out. Settlers moving in from Old Canton in Smith County named the town. The first district courthouse in Canton opened in 1850 along with a post office, the fourth one in the county. Property for the town’s first school, the Canton Academy, was acquired in 1853. The *Canton Weekly Times*, owned by Sid S. Johnson, began publication as the county’s first newspaper in 1860. By 1890, Canton had a population of 421. By 1892, brick buildings were being built, and a new brick courthouse was completed in 1894. That’s a lot of growth for a small town in Texas. But it was just the beginning.

2:00

First Monday began in the 1850s. It was common in those days for the circuit judge to make his rounds to his assigned towns on specific days to hold court sessions. People from all over the area would find their way to Canton would make a point of coming to town to conduct business, stock their pantries, watch court proceedings, and even watch a “hanging” or two. There was one incident where a man was hung for stealing his partner’s wagon of goods he was bringing into Canton for trading. He is actually buried facing south in Hillcrest Cemetery near the First Monday Trades Day grounds. During those days, Canton’s designated day was the first Monday of each month. Canton is located in Van Zandt County. Most of the county was open range at that time. In the

Western United States and Canada open range is rangeland where cattle roam freely regardless of land ownership. Where there were open range laws, if someone wanted to keep animals off their property, they had to build a fence to keep the animals out. Many wild horses roamed the land as well as cattle. The law in Van Zandt county required that all stray horses should be brought into Canton where they would be auctioned off to the highest bidder. These auctions were conducted on the same Monday as the arrival of the circuit judge. This Monday became known as "Horse Monday". In fact, the crowds began to become even larger when word spread that First Monday Canton was a good place to buy and sell horses. Horse traders from out of state even began to attend. Soon people began to bring their own horses to sell or trade, and as the years passed, they began to bring their excess crops, such as fresh produce, grain, and sugar cane syrup. As a result, the name began to change from "Horse Monday" to First Monday Trades Day. The trading took place just off the west side of the courthouse square.

3:00

During this time, communication between neighbors and family members who didn't live together could be difficult. There were no telephones, and mail was not delivered door to door. Often people would wait until First Monday to go to Canton to see their relatives and friends, take care of personal business, and catch up on the local news. Politicians would be sure to take advantage of First Monday by campaigning when there were lots of people to listen to their speeches. As time passed, the population of Canton increased, and the attendance for First Monday increased along with it. Vendors began to set up trading operations on the streets. People would walk up and down the streets trading, visiting and conducting business. This might not sound like much, but the townspeople began to be disturbed by the event. After each First Monday, they had to clean up the filth and confusion that cluttered their streets. Finally, a city ordinance was passed prohibiting trade in the streets. Although the townspeople hoped that this would dissuade the crowds, this did not happen. The crowds would descend every month like clockwork. This continued through the turn of the century and into the 1930s.

4:00

It wasn't until the 1940s that the crowds began to decline. Farmers began using tractors instead of horses to plow their fields. Horse trading began to decline. But, it wasn't long before another type of trading began to take place - hogs. Local pig farmers gained the reputation of having the cleanest and finest pigs sold anywhere. This became known as "Hog Monday". Because the hogs sold were cholera free, buyers came from all over Texas, Oklahoma, and Arkansas to purchase them. Cholera is an acute diarrheal illness caused by infection of the intestine with *Vibrio cholerae* bacteria. People can get sick when they swallow food or water contaminated with cholera bacteria. The infection is often mild or without symptoms but can sometimes be severe and life-threatening. If a person throws up repeatedly or has severe diarrhea, they can become so dehydrated that they become severely ill or even die. Cholera has been nicknamed the "blue death" because a person's skin may turn bluish-gray from extreme loss of fluids.

5:00

By the 1950s crowds had become so large that space became a problem. One woman who owned a large lot of land near the courthouse square began patrolling her property with a broom to keep people off. When a trader offered to rent space from her, she decided to take advantage of it. Soon she was making \$100 every First Monday. One widow was offered 25 cents for the use of her bathroom, and soon she was making money on First Monday as well. Because space was limited, traders began arriving on Sunday to try to get the best space. Soon churches began to complain about all of the crowds and noise. Sanitation and lodging became a huge concern because there were not enough hotels and adequate bathroom facilities. A city police force was needed to control order and keep crime down. First Monday was definitely becoming a problem for the city of Canton.

6:00

Besides pigs, dogs were also a commodity. Although it began with farmers bringing in strays, hunters started bringing in hound dogs to trade. Soon dogs were selling for as much as \$500! First Monday gained a new name for dog people all over the Southwest as it began to be called "Dog Monday". A person wanting to find a dog could purchase anything from a Russian Setter to specialized squirrel dogs to plain old hunting dogs. A

problem developed, however, because after the event, many of the dogs that did not sell were simply released. Canton found itself flooded with stray dogs. This caused the city to have to hire a dog catcher. In the early 1960s, a man was bitten by a dog and died of rabies. Rabies is a deadly virus which is spread to people from the saliva of infected animals. Rabies is usually spread through an animal bite. Animals most likely to spread rabies include dogs, bats, coyotes, foxes, skunks, and raccoons. Symptoms include fever, headache, excess salivation, muscle spasms, paralysis, and mental confusion. As a result, a city ordinance was passed prohibiting the sale or trade of dogs. The townspeople thought this might shut down the trade days altogether. It didn't. Instead, an individual purchased 3 acres of land and held the dog trade on his private property. The city required that all dogs be vaccinated and kept leashed or penned.

7:00

By 1965, First Monday had outgrown the town square. The City of Canton decided to stop fighting it and take action. Rules and regulations had to be enacted, a location for the trades day had to be secured, and some kind of order had to be established. The City did not have the funds to move the trading area, so Angus Travis and Joe Hackney partnered and purchased six and a half acres of land north of the square and designated it as a trading area. The City leased the land from H & T Parking and the area was divided into spaces. Each space was rented for a nominal fee, depending upon the type of merchandise offered for sale or trade. This was a new beginning for an old tradition, with a plan for the future. In a short time, this area became filled to overflowing. As more land could be secured by the City, adjoining the original site, it was bought and developed for use.

8:00

Now, nearly 70 years later, First Monday Trade Days is still going strong. Every month between 200,000 and 400,000 tourists, visitors, and vendors roll into town and get together to create a shopping experience as big as Texas. The Trade Days area consists of over 450 acres of shopping, 4 miles of which is covered. Food trucks and small pop-up restaurants provide great festival food. Craftsmen and resale merchants provide a wide variety of items for sale, and the animal trade is still going strong. In April of 2020,

due to Covid-19 shut downs, Canton trade days had to shut down for two months. This was the first time since 1853 that Canton had not held a trades day. It reopened for the June First Monday and is still going strong.

9:00 Over time, First Monday has gained national recognition. Feature stories appeared in Life Magazine, Look Magazine, and the Saturday Evening Post. Texas newspapers periodically ran stories about its appeal and uniqueness. Originally, First Monday only occurred on the first Monday of each month. However, if you look at the calendar of events for the City of Canton now, you will see that it no longer happens on Monday. Instead it is scheduled for the Thursday - Sunday before the first Monday of the month. That allows even more visitors to attend and explore the thousands of vendor sites. Even though the event goes from Thursday – Sunday, the name is now and will forever be known as First Monday Trade Days.

FALL/WINTER DISTRICT 2022-2023

A+ ACADEMICS



University Interscholastic League



Listening

grades 7 & 8

**DO NOT OPEN TEST
UNTIL TOLD TO DO SO**

UIL LISTENING CONTEST - GRADES 7/8
FALL/WINTER DISTRICT 2022-2023
TEST

"CANTON TRADE DAYS"

1. In which decade did First Monday Trade Days begin?
A. 1840s B. 1850s
C. 1860s D. 1870s

2. Why is the disease cholera often called the "blue death"?
A. A person's skin takes on a blue coloring due to lack of fluids.
B. The medication prescribed gives a person's bodily fluids a blue tint.
C. In death, the fingernails turn blue due to low oxygen.
D. More blue-eyed people die from cholera than do brown-eyed people.

3. Why was a city ordinance passed prohibiting the sale or trade of dogs?
A. poor sanitation conditions B. inability to contain fleas
C. lack of animal control D. an outbreak of rabies

4. First Monday Trade Days has been featured in all of the following magazines except
A. *Life Magazine* B. *Look Magazine*
C. *Time Magazine* D. *The Saturday Evening Post*

5. How many square miles is the State of Texas?
A. 264,856 B. 268,596
C. 284,986 D. 396,684

6. By the year _____ First Monday Trade Days had outgrown the city square.
A. 1965 B. 1967
C. 1975 D. 1980

7. What was the original reason people gathered in Canton on the first Monday of the Month?
A. People came to buy, sell, and trade horses.
B. The circuit judge came to town on that day.
C. The county hanging day was the first Monday.
D. Every county had a specific day for trading produce.

8. Why were horses brought to Canton on the first Monday of the month?
- A. Open range laws required that all stray horses be auctioned off.
 - B. Van Zandt County did not abide by open range laws.
 - C. Most people in the county needed horses for farming.
 - D. The county judge needed to be present for all horse sales.
9. Where was the man who was hung for stealing his partners wagon full of trade day supplies buried?
- A. on the Trade Days grounds
 - B. Van Zandt county cemetery
 - C. Hillcrest Cemetery
 - D. under the hanging tree
10. What caused the decline of horse trading at Canton?
- A. Texans began to move to the city from rural areas.
 - B. Hog trading became more popular.
 - C. The city of Canton passed an ordinance against animal trading.
 - D. Farmers began to use tractors instead of horses for plowing.
11. First Monday Trade days has been known by all of the following except
- A. Dog Days
 - B. Horse Days
 - C. Produce Days
 - D. Hog Days
12. Due to Covid 19, April 2020 was the first time Trade Days had been closed since the year _____.
- A. 1951
 - B. 1952
 - C. 1953
 - D. 1956
13. Where did trading originally take place in Canton?
- A. across from the horse barns
 - B. just off the west side of the courthouse square
 - C. on the same plot of land that Trade Days still occurs
 - D. about three miles from the original post office
14. Although the original parcel of land purchased for Trade Days was only 6.5 acres, currently, Trade days consists of _____ acres.
- A. 350
 - B. 375
 - C. 400
 - D. 450
15. Who was the original owner of *The Canton Weekly Times*?
- A. W.P. King
 - B. Angus Travis
 - C. Sid S. Johnson
 - D. Joe Hackney
16. A new brick courthouse was built in Canton during
- A. 1894
 - B. 1876
 - C. 1862
 - D. 1904

17. What happened to the dogs that were not purchased during Trade Days?
- A. They were sold cheaply at auction.
 - B. Some were taken back to their homes while others were killed.
 - C. Vendors took surplus dogs to different flea markets throughout Texas.
 - D. Unsold dogs were released to roam freely and fend for themselves.
18. How many miles of covered walkways does Canton Trade Days currently have?
- A. 12
 - B. 4
 - C. 6
 - D. 8

True/False

19. One Canton man who owned a large lot of land near the courthouse square began patrolling his property with a broom to keep people off but eventually accepted \$300 to sell the land to a vendor.
20. When the City of Canton did not have the funds to move the trading area to a larger location, Angus Travis and Joe Hackney partnered and purchased six and a half acres of land north of the square and designated it as a trading area.
21. Due to the popularity of horse trading and the large crowds it attracted, people soon began to bring their excess crops, such as fresh produce, grain and sugar cane prompting people to begin calling the first Monday of the month Trade Days.
22. During the early years of Canton Trade Days, the term open range meant that livestock could roam freely across the land unless the land owner fenced off his land.
23. When an outbreak of cholera occurred during the Hog Monday days, the city of Canton passed a law against selling hogs in an effort to shut down trade days altogether.
24. Although the land for Canton, Texas was surveyed in the 1840s, no settlement was made until 1950 when the town was laid out and named by settlers moving in from Old Canton in Smith County.
25. Because space was limited, during the early days, traders began arriving on Sunday to try to get the best space causing church attendance to spike.

UIL LISTENING CONTEST - GRADES 7/8
FALL/WINTER DISTRICT 2022-2023
ANSWER KEY

"CANTON TRADE DAYS"

- | | |
|-------|-------|
| 1. B | 14. D |
| 2. A | 15. C |
| 3. D | 16. A |
| 4. C | 17. D |
| 5. B | 18. B |
| 6. A | 19. F |
| 7. B | 20. T |
| 8. A | 21. T |
| 9. C | 22. T |
| 10. D | 23. F |
| 11. C | 24. T |
| 12. C | 25. F |
| 13. B | |

**UIL LISTENING CONTEST - GRADES 7 & 8
SPRING DISTRICT 2022-2023**

**Contest Script – “Nellie Bly: America’s First Investigative
Journalist”**

In today’s world, most women reporters are treated very similar to their male counterparts. They travel all over the world to investigate and report on a wide range of crimes and situations. However, this hasn’t always been the case. Nellie Bly was a journalist in the 1800s. Writing and editing real news was considered a man’s job. Nellie Bly shattered that idea and became America’s first woman to be an investigative journalist.

1:00

Nellie Bly was born Elizabeth Jane Cochran on May 5, 1864, to Michael and Mary Jane Cochran. The marriage was the second one for both Michael and Bly's mother, Mary Jane, who wed after the deaths of their first spouses. Michael had 10 children with his first wife and five more with Mary Jane, who had no prior children. In fact, Elizabeth was daughter number 13 for Michael. Elizabeth’s family owned a mill in Cochran, Pennsylvania. The town was named after her father, Michael Cochran. They were considered wealthy, as her father was a landowner, businessman, and judge. At the age of six in 1870, Elizabeth lost her father. Her father’s death presented a grave financial situation to his family, as he left them without a will. At this time, women could not own property, so her mother had no legal claim to his estate. Instead, the estate was divided equally among his 15 children and his wife. In effect, Mary Jane was left with only a small part of what had once been considered significant wealth. As a young girl, Elizabeth took on the nickname “Pinky” because it was her favorite color. However, as a teen, she dropped the nickname in an effort to make herself seem more sophisticated. When Elizabeth was a teenager, the family moved to Pittsburgh. Her mother rented out rooms in their home to help pay the bills. Elizabeth wanted to be a teacher, but there was little money for her training.

2:00

Although she began attending Indiana Teacher’s College, she was unable to finish her

education because she didn't have the money for tuition. No longer in school, Elizabeth focused on helping her mother run the boardinghouse.

3:00

One day, in 1885, when she was 21, Elizabeth read an article in the *Pittsburgh Dispatch* that made her angry. In the piece, writer Erasmus Wilson declared that girls were good for marriage but not for education or a career. His article was entitled "What Girls Are Good For." This upset her so much that Elizabeth decided to write an open letter to the editor of the *Pittsburgh Dispatch*. She anonymously signed the letter "Lonely Orphan Girl." In the letter, she blasted the newspaper for its negative representation of women. The editor, George Madden, not only read Bly's response, he printed it, and posted a request for the "Lonely Orphan Girl" to stop by his newspaper to meet him. When she did, he offered her a job as columnist at a rate of \$5 per week.

At this time, journalism wasn't thought of as acceptable work for women, so most women journalists used pen names to disguise their identity. As a newspaper writer, Elizabeth took the pen name Nellie Bly. Nelly Bly was the title of a popular folk song of the day written by Stephen Foster. Bly's first article for the *Pittsburgh Dispatch* was "The Girl Puzzle" which discussed the need for reform of divorce laws which unfairly favored men. She went on to write about factory work which included unsafe working conditions, poor wages, and long hours. This honest reporting attracted negative attention from local factory owners. Because he did not want to anger Pittsburgh's wealthy elite, Madden quickly reassigned Bly to write women's news.

4:00

This limited arena of writing frustrated Bly, so in 1886, she convinced the editor to send her to Mexico to write a travel piece. She spent part of her time writing about her experiences as a tourist, however, she also wrote reports about the poverty and political corruption she witnessed in the country. She also wrote about a Mexican journalist who was sent to prison for criticizing the government. Eventually, she was forced to leave Mexico to avoid being arrested. Her stories were published in a book called *Six Months in Mexico* in 1888.

Because she wanted to write pieces that addressed both men and women, Bly began looking for a paper that would allow her to write more serious work. In 1886, she moved to New York City. Again, due to being a woman journalist, Bly found it extremely hard for her to find work. Finally, she got a job reporting for New York World by agreeing to work on an undercover assignment. Posing as a mental patient, she spent several days on Blackwell's Island, a mental institution. In the 1800s, people with mental illness were often mistreated. In an effort to accurately expose the conditions at the asylum, she lived undercover as a mental patient for 10 days. Bly's exposé, published in the World soon after her return to reality, was a massive success. She wrote about the filthy conditions, rotten food, beatings, and ice-cold baths.

5:00

The *New York World* published Bly's articles about her time in the insane asylum on Blackwell's Island in a six-part series. *Ten Days in a Mad-House* quickly made Bly one of the most famous journalists in the United States. The piece ultimately spurred a large-scale investigation of the institution. Led by New York Assistant District Attorney Vernon M. Davis, with Bly assisting, the asylum investigation resulted in significant changes in New York City's Department of Public Charities and Corrections. These changes included a more money being provided for the care of mentally ill patients, stronger supervision of nurses and other healthcare workers, and regulations to prevent overcrowding and fire hazards at the city's medical facilities.

6:00

Active investigative journalists were commonly known as muckrakers. Muckrakers brought attention to inequalities or hazardous practices and motivated society to take action. Bly followed her Blackwell investigations by uncovering the abuse of women by male police officers, identifying an employment agency that was stealing from immigrants, and exposing corrupt politicians. She also interviewed controversial figures including Lizzie Halliday in 1893. Lizzie Halliday was an Irish-American serial killer responsible for the deaths of four people in upstate New York during the 1890s. In 1894, she became the first woman to be sentenced to death by the electric chair. Halliday's sentence was commuted, and she spent the rest of her life in a mental institution. In

1894, Bly interviewed John P. Haines, the president of the American Society for the Prevention of Cruelty to Animals (ASPCA). He was investigating the conditions at the Central Park Zoo. He found that the hippo pool was filthy and there were not enough shelters to protect the animals during bad weather.

7:00

By 1888, Bly began to feel restless. After reading the popular book *Around the World in 80 Days* by Jules Vern, she decided to travel around the world alone to attempt to break the record of Phileas Fogg, the fictional main character of the novel. She set out on November 14, 1889 in Hoboken, New Jersey traveling first by ship and later by horse, rickshaw, sampan, and many other vehicles. Her journey took her to England, France, Egypt, Singapore, Hong Kong, and Japan. As she traveled, she wrote articles and sent them to the newspaper using telegram and mail. People in the United States were very interested in her travels. The *New York World* built up the story by running daily articles and a guessing contest in which whoever came nearest to guessing her time in circling the globe would win a trip to Europe. There were nearly one million entries in the contest. After reaching California, Bly took a very fast train, *The Queen*, on the Southern Pacific Railroad to hurry back to New York. She completed the trip in 72 days, 6 hours, 11 minutes and 14 seconds—setting a real-world record, despite her fictional inspiration for the undertaking. Her record was beaten in 1890 by George Francis Train, who finished the trip in 67 days. Because of the continuous coverage in the *New York World*, Bly earned international stardom. Nellie Bly's Book, *Around the World in Seventy-two Days*, published in 1890 was a great popular success, and the name Nellie Bly became a synonym for a female star reporter.

8:00

In 1895, Nellie married millionaire Robert Seaman and retired from journalism at the age of 31. Her husband Robert was 40 years older than her and died in 1903. In his will, he left her in control of his massive manufacturing company. The company, Iron Clad Manufacturing Company, manufactured the first 55-gallon steel oil drum. This is the same standard type of steel oil drum used today. While she was in charge of the company, she added fitness gyms, libraries and healthcare for her workers. This was

unheard of during this time. Eventually, the cost of these benefits would drain her finances. She began writing again for the *New York Evening Journal* in 1920 and reported on many events including the women's suffrage movement and World War I. While she was still working as a writer, she died in New York City from pneumonia on January 27, 1922. She was 57 years old. After her death, the *New York Evening Journal* declared her to be "The Best Reporter in America."

In 1998, Bly was inducted into the National Women's Hall of Fame. She was one of four journalists honored with a US postage stamp in a "Women in Journalism" set released in 2002. In 2015, director Timothy Hines released a movie titled *10 Days in a Madhouse*, which depicted Nellie's experience in the mental asylum, and, in 2019, Lifetime movies released a thriller also based on this experience. The role of Nellie Bly was played by Cristina Ricci, and Judith Light played the role of the head nurse.

9:00

Nellie Bly was a reporter for the underdog. She spoke out for people who had no money, no power, and no voice. She was a courageous reporter who never took no for an answer.

SPRING DISTRICT 2022-2023

A+ ACADEMICS



University Interscholastic League



Listening
grades 7 & 8

**DO NOT OPEN TEST
UNTIL TOLD TO DO SO**

UIL LISTENING CONTEST - GRADES 7/8
SPRING DISTRICT 2022-2023

TEST

“Nellie Bly: America’s First Investigative Journalist”

1. What was Nellie Bly’s actual name?
 - A. Elizabeth Martha Seaman
 - B. Martha Jane Cochran
 - C. Elizabeth Jane Cochran
 - D. Mary Elizabeth Hines

2. Who gave Nellie Bly her first job as a journalist?
 - A. Robert Hines
 - B. Stephen Foster
 - C. Vernon Davis
 - D. George Madden

3. How many children did Bly’s father have?
 - A. 15
 - B. 20
 - C. 25
 - D. 30

4. Where did Nellie attend college?
 - A. Indiana Teacher’s College
 - B. Pittsburg School of Journalism
 - C. New York State University
 - D. Pennsylvania College

5. What book did Bly have published in 1888?
 - A. *Ten Days in a Mad House*
 - B. *Around the World in 80 Days*
 - C. *Six Months in Mexico*
 - D. *The Queen*

6. Why was Bly frustrated with her first job as a journalist?
 - A. Her editor expected her to go undercover, and she had no experience.
 - B. She was unable to make enough money to pay her rent and live comfortably.
 - C. Her assignments were only typical women’s pieces and weren’t fulfilling.
 - D. The job required too much time away from helping her mother.

7. What was Nellie’s nickname as a young child?
 - A. Nellie because she loved the song Nellie Bly
 - B. Pinky because it was her favorite color
 - C. Noodle because she liked to doodle in a journal
 - D. Trece because she was her father’s 13th daughter

8. How old was Nellie Bly when she took her first newspaper job?
- A. 18
 - B. 19
 - C. 20
 - D. 21
9. How long did Nellie Bly spend travelling in Mexico?
- A. 3 months
 - B. 5 months
 - C. 6 months
 - D. 8 months
10. In 2015, who released a movie titled *10 Days in a Madhouse*, which depicted Nellie's experience in the mental asylum?
- A. Christina Ricci
 - B. Judith Light
 - C. Timothy Hines
 - D. Vernon Davis
11. What company did Nellie take over after the death of her husband?
- A. Iron Clad Manufacturing
 - B. Solid Steel Drum Company
 - C. Seaman Steel
 - D. Elite Manufacturing
12. Who was Nellie Bly working for when she died?
- A. *New York World*
 - B. *New York Times*
 - C. *New York Evening Post*
 - D. *New York Evening Journal*
13. What was the name of the first article Nellie Bly had published?
- A. Lonely Orphan Girl
 - B. What Girls are For
 - C. Women in Factories
 - D. The Girl Puzzle
14. Why did Nellie Bly have to leave Mexico?
- A. She fell in with the wrong people and made them mad.
 - B. Her editor decided to give her an undercover assignment.
 - C. She wrote articles that angered the Mexican government.
 - D. It was too dangerous or her to stay without an escort.
15. After her death, the *New York Evening Journal* declared her to be
- A. a woman ahead of her time.
 - B. the best reporter in America.
 - C. a muckraker that can never be replaced.
 - D. a reporter with true grit.

16. What was the result of Bly's undercover work on Blackwell's Island?
- A. Factory owners were enraged but began to allow workers to take breaks.
 - B. Investors funded improvements to the hippo pool and enclosure.
 - C. New laws were passed to improve the care of mental patients.
 - D. The police department was overhauled to reduce misbehavior of officers.
17. In 1894, Lizzie Halliday became the first woman to
- A. be sentenced to death by the electric chair.
 - B. be convicted as a serial killer in the United States.
 - C. have a serial murder conviction overturned.
 - D. receive a commutation of a death sentence.
18. Who's record did Nellie attempt to beat as she traveled around the world?
- A. Jules Vern
 - B. George Francis Tran
 - C. Filleas Fogg
 - D. John P. Haines

True/False

19. When Elizabeth was a teenager, her family moved to Pittsburgh, Pennsylvania where her father worked as a judge and her mother ran a boarding house.
20. An article in the *Pittsburgh Dispatch* made Nellie angry because the writer, Erasmus Wilson, declared that girls were good for marriage or working in factories or schools but not for business or newspaper reporting.
21. Because she wanted to write pieces that would address more serious issues, Bly moved to New York City in 1886.
22. While she was in charge of the company she gained during her divorce, she added co-ed fitness gyms, libraries and healthcare for her workers which was unheard of during this era in history.
23. In 1895, Nellie married and retired from journalism at the age of 31. Her husband Robert was 40 years older than her and died in 1903.
24. Nellie Bly's Book, *Around the World in Seventy-two Days*, which was published in 1897 chronicled her record, which was eventually broken by John Haines in 1905 and made Nellie Bly synonymous for a female star reporter.
25. In 1998, Bly was inducted into the National Women's Hall of Fame and was one of four journalists honored with a US postage stamp in a "Women in Journalism".

UIL LISTENING CONTEST - GRADES 7/8
SPRING DISTRICT 2022-2023

ANSWER KEY

“Nellie Bly: America’s First Female Investigative Journalist”

1. C

2. D

3. A

4. A

5. C

6. C

7. B

8. D

9. C

10. C

11. A

12. D

13. D

14. C

15. B

16. C

17. A

18. C

19. F

20. F

21. T

22. F

23. T

24. F

25. F

FOR GRADER USE ONLY

Score Test Below:

_____ Initials _____

_____ Initials _____

Papers contending to place:

_____ Initials _____



**University Interscholastic League
A+ Maps/Graphs/Charts Contest • Answer Sheet**

Write your contestant number in the upper right corner, and circle your grade below.

Circle Grade Level: 5 6 7 8

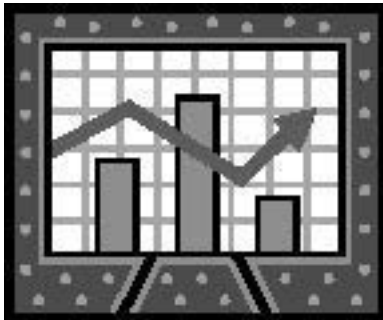
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|-------|---|---|---|-------|---|-------|---|-------|---|---|---|
| 1. A | B | C | D | 26. T | F | 51. A | B | C | D | | |
| 2. A | B | C | D | 27. T | F | 52. A | B | C | D | | |
| 3. A | B | C | D | 28. T | F | 53. A | B | C | D | | |
| 4. A | B | C | D | 29. T | F | 54. A | B | C | D | | |
| 5. A | B | C | D | 30. T | F | 55. A | B | C | D | | |
| 6. A | B | C | D | 31. A | B | C | D | 56. T | F | | |
| 7. A | B | C | D | 32. A | B | C | D | 57. T | F | | |
| 8. A | B | C | D | 33. A | B | C | D | 58. T | F | | |
| 9. A | B | C | D | 34. A | B | C | D | 59. T | F | | |
| 10. A | B | C | D | 35. A | B | C | D | 60. T | F | | |
| 11. A | B | C | D | 36. A | B | C | D | 61. A | B | C | D |
| 12. A | B | C | D | 37. A | B | C | D | 62. A | B | C | D |
| 13. A | B | C | D | 38. A | B | C | D | 63. A | B | C | D |
| 14. A | B | C | D | 39. A | B | C | D | 64. A | B | C | D |
| 15. A | B | C | D | 40. A | B | C | D | 65. A | B | C | D |
| 16. A | B | C | D | 41. T | F | 66. A | B | C | D | | |
| 17. A | B | C | D | 42. T | F | 67. A | B | C | D | | |
| 18. A | B | C | D | 43. T | F | 68. A | B | C | D | | |
| 19. A | B | C | D | 44. T | F | 69. A | B | C | D | | |
| 20. A | B | C | D | 45. T | F | 70. A | B | C | D | | |
| 21. A | B | C | D | 46. A | B | C | D | 71. T | F | | |
| 22. A | B | C | D | 47. A | B | C | D | 72. T | F | | |
| 23. A | B | C | D | 48. A | B | C | D | 73. T | F | | |
| 24. A | B | C | D | 49. A | B | C | D | 74. T | F | | |
| 25. A | B | C | D | 50. A | B | C | D | 75. T | F | | |

INVITATIONAL 2022-2023

A+ ACADEMICS



University Interscholastic League



Maps, Graphs & Charts

grades 7 & 8

**DO NOT OPEN TEST
UNTIL TOLD TO DO SO**

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Australia

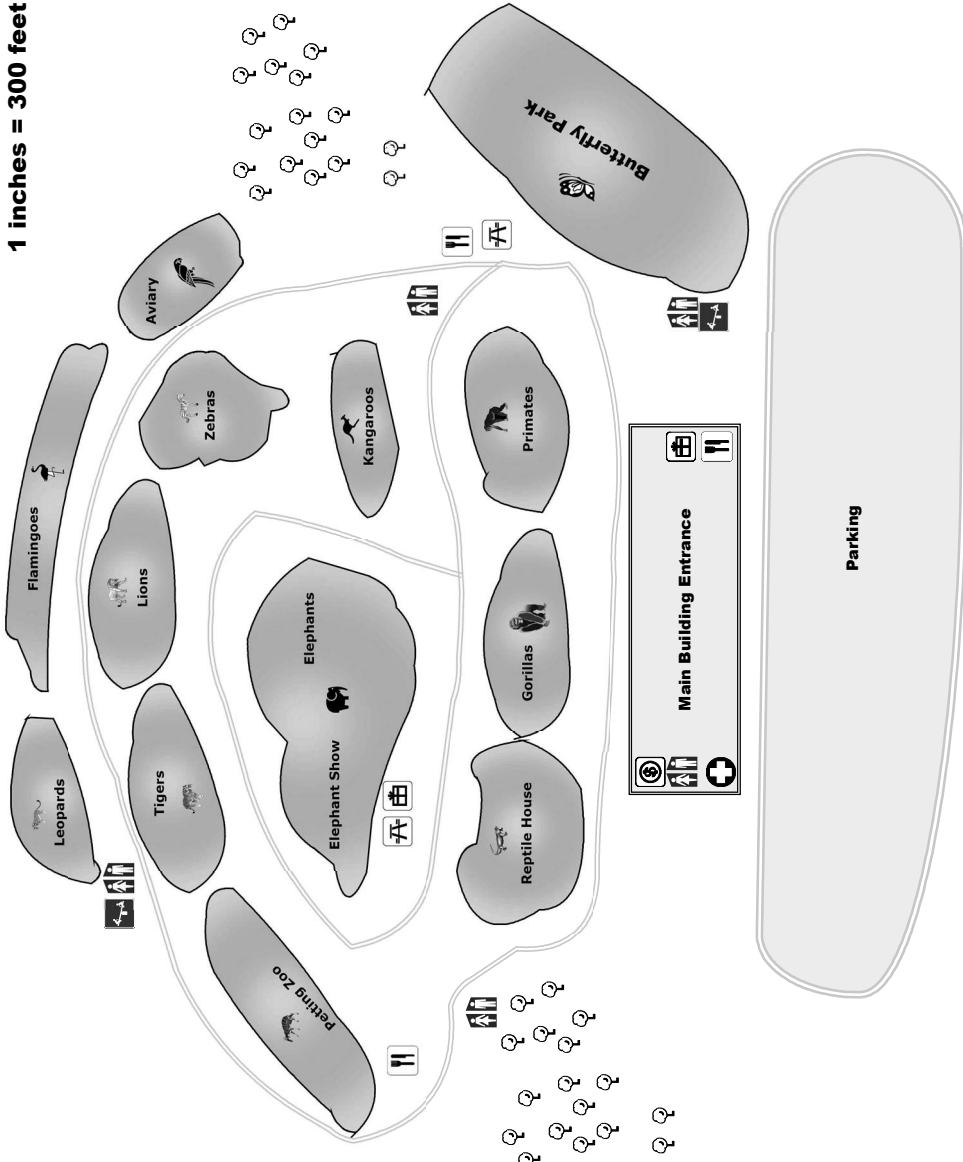
- The longest river in Australia runs through what part of the country?
 - Southeast
 - Southwest
 - Northwest
 - Northeast
- What is the territorial capital of French Polynesia?
 - Canberra
 - Tarawa
 - Papeete
 - Manila
- What's the largest city on Australia's west coast?
 - Brisbane
 - Adelaide
 - Perth
 - Bunbury
- What is the precipitation level of Sydney?
 - Under 10 inches per year
 - Between 10 and 20 inches per year
 - Between 20 and 40 inches per year
 - Over 40 inches per year
- What is the primary land cover type of Indonesia?
 - Cropland
 - Tropical rain forest
 - Grassland
 - None of the above
- What body of water lies between Semarang, Indonesia and Borneo?
 - Java Sea
 - South China Sea
 - Celebes Sea
 - Molucca Sea
- The Outback covers how much of Australia?
 - Ten percent
 - Twenty percent
 - Forty percent
 - Eighty percent
- What is the climate of Australia's northern coast?
 - Steppe
 - Desert
 - Savanna
 - Marine
- What is the most densely populated country in Australia and Oceania?
 - Australia
 - Nauru
 - Palau
 - New Zealand
- Which of the following countries is transcontinental?
 - Indonesia
 - Thailand
 - Vanuatu
 - Cambodia
- On the land cover map, what does the pink line running through New Guinea indicate?
 - Land cover type change
 - Elevation change
 - Continental boundary
 - International boundary
- Which of the following resources is not found in New Zealand?
 - Gold
 - Iron
 - Tin
 - Silver
- How far is it from Merredin, Australia to Albany, Australia?
 - About 100 miles
 - About 250 miles
 - About 400 miles
 - About 500 miles
- Mainland Australia is divided into how many states?
 - 4
 - 6
 - 10
 - 12
- Which is the world's oldest continuous culture?
 - Polynesian
 - Micronesian
 - Melanesian
 - Aborigine

County Zoo

Open: Weekdays: 9am to 7pm
Weekends: 8am to 8pm



1 inches = 300 feet



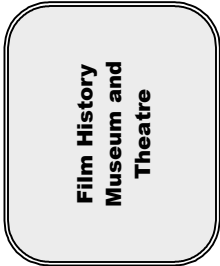
Twine St.

6th St. (one way)

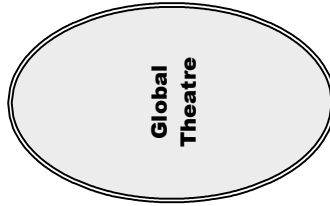


State
Aquarium

Spot St.



Film History
Museum and
Theatre



Global
Theatre

- Playground
- Restroom
- Concession
- ATM Machine
- Gift Shop
- Picnic Area
- First Aid
- Water Fountain

Zoo Entrance

5th St. (one way)



History
Museum



Art
Museum

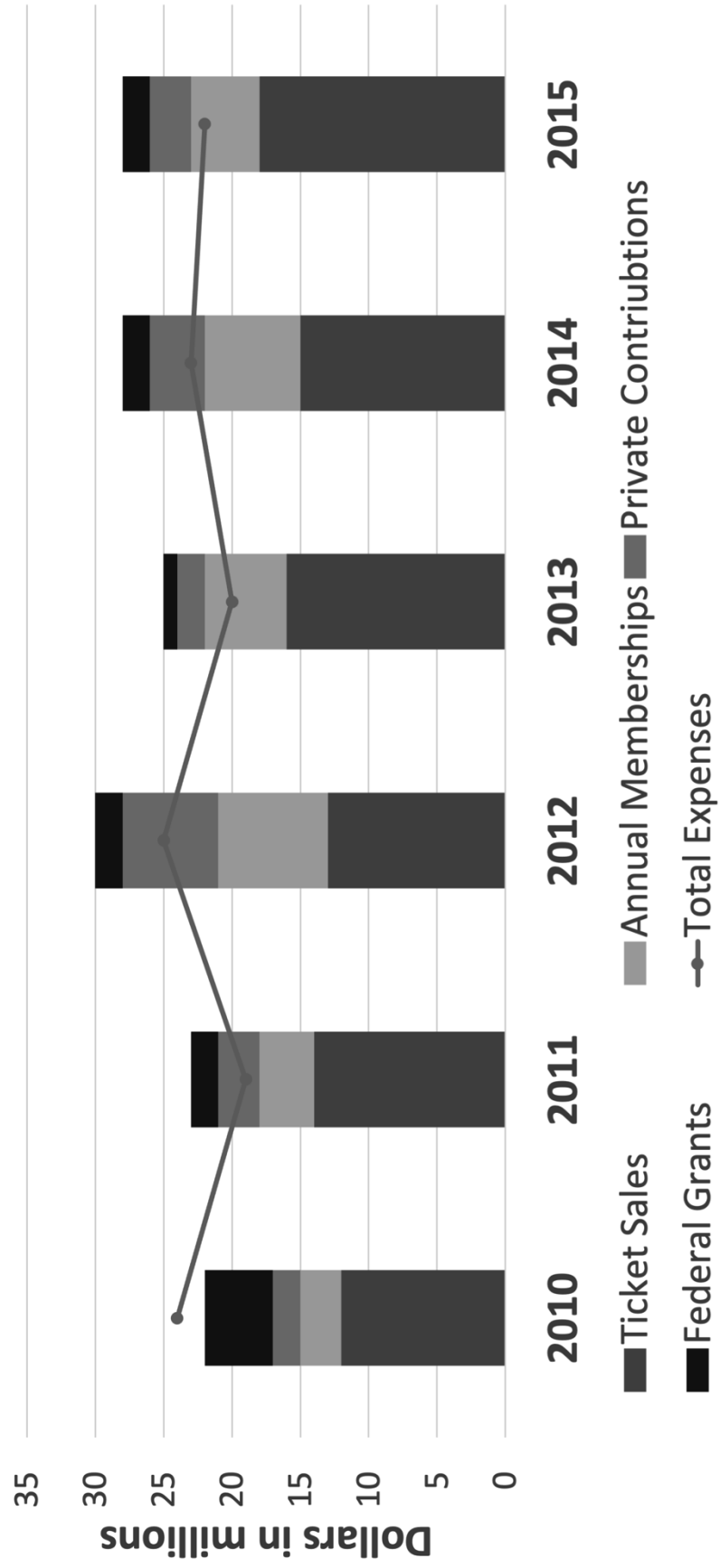


Life Science
Museum

County Zoo Map

16. Which of the following streets is one way only?
- Spot St.
 - Twine St.
 - 6th St.
 - None of the above
17. The nearest gift shop to the Flamingo Exhibit is in what direction?
- Northwest
 - Southwest
 - Northeast
 - Southeast
18. The zoo opens at what time on Thursdays?
- 9:00 a.m.
 - 10:00 a.m.
 - 7:00 p.m.
 - 8:00 p.m.
19. How is public parking accessed?
- By heading west on 5th Street
 - By heading south on 6th Street
 - By heading north on 5th Street
 - By heading east on 6th Street
20. How many first aid stations are indicated on the map?
- 0
 - 1
 - 2
 - 3
21. Which of the following is located directly north of the main building?
- Playground
 - ATM machine
 - Gift shop
 - Picnic area
22. How far is it from the corner of 5th and Twine to the main entrance?
- About 300 feet
 - About 600 feet
 - About 1,200 feet
 - Scale not indicated on the map
23. Which of the following is not located on south side of Twine Street?
- State Aquarium
 - Art Museum
 - Global Theatre
 - All of the above
24. How many hours is the zoo open on Saturdays?
- 8
 - 9
 - 10
 - 12
25. How many gift shops are located in the zoo?
- 0
 - 1
 - 2
 - 4
- TRUE/FALSE**
26. Parking is located at the south end of the zoo.
27. The zoo opens and closes earlier on weekends.
28. There are more concessions than picnic areas.
29. 6th street only runs north to south.
30. The Petting Zoo is the attraction furthest south.

Zoo Income and Expenditures



Zoo Income and Expenditures

31. What does the horizontal line going across the columns represent?
- The year
 - Source of income
 - Expenses
 - The amount of income
32. How much did the zoo receive from federal grants in 2010?
- \$50,000
 - \$60,000
 - \$40,000
 - None of the above
33. What item is represented by the lightest column?
- Ticket sales
 - Annual memberships
 - Federal Grants
 - Total expenses
34. What time span is covered by the graph?
- Twelve months
 - Six months
 - Six years
 - Twelve months
35. What year did the zoo take in the most income overall?
- 2010
 - 2011
 - 2012
 - 2013
36. How many times was revenue from private contributions higher than from federal grants?
- 0
 - 1
 - 3
 - 5
37. Which source of income generated the most revenue over the time covered by the chart?
- Ticket sales
 - Annual memberships
 - Private contributions
 - Federal Grants
38. In how many years did expenses outpace income?
- 0
 - 1
 - 2
 - 4
39. Which year had the highest difference between revenue and expenses?
- 2010
 - 2012
 - 2014
 - 2015
40. In how many years did the zoo generate more than 5 million in income?
- 0
 - 1
 - 4
 - 6
- TRUE/FALSE**
41. Ticket sales increased every year.
42. The highest amount of income occurred in the same year as the highest amount of expense.
43. Ticket sales were at least double the amount of every other income source combined every year.
44. The strongest year for ticket sales occurred in 2015.
45. The numbers on the left side of the chart represent expense and revenue in millions of dollars.

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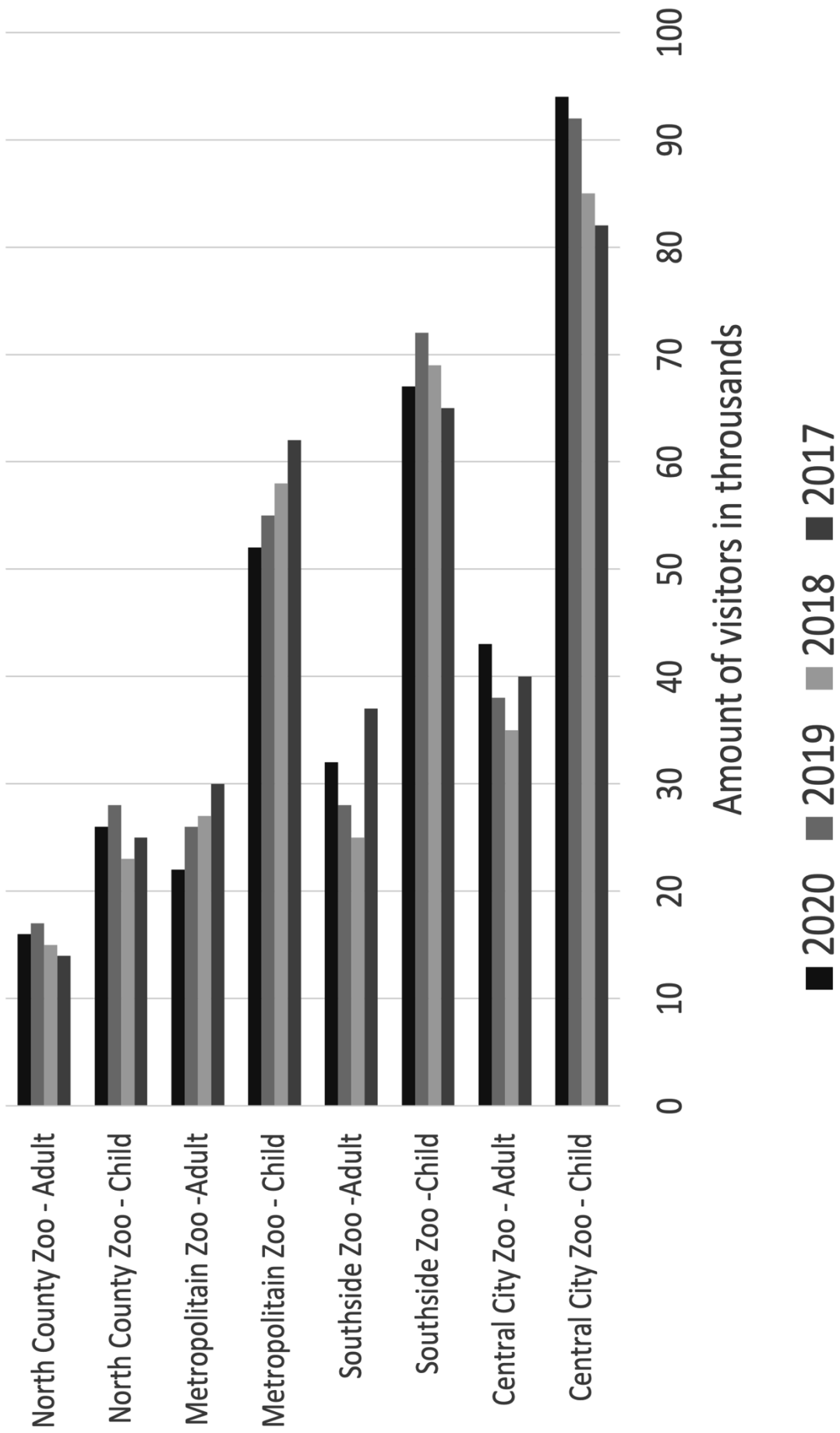
North America

46. What is the longest river in Canada?
- Mississippi River
 - Saskatchewan River
 - Mackenzie River
 - St. Lawrence River
47. Marine climate can be found in what area of the United States?
- Southwest
 - Northwest
 - Southeast
 - Northeast
48. What Canadian city is located on the shore off James Bay?
- Alma
 - Eastmain
 - Parent
 - Waterloo
49. What is the third most spoken language in Canada?
- English
 - French
 - Chinese
 - Dutch
50. The southern area of Arizona has what type of land cover?
- Semi-desert and desert
 - Cropland
 - Grassland
 - Broadleaf forest
51. Which of the following states is not in Tornado Alley?
- Texas
 - Arkansas
 - Kansas
 - Nebraska
52. What is the main land use type in Iowa?
- Ranching
 - Forestry
 - Commercial farming
 - No widespread use
53. On the United States Political Relief Map, what is the scale of the Hawaii insert?
- One inch equals 151 miles
 - One inch equals 251 miles
 - One inch equals 351 miles
 - One inch equals 451 miles
54. Which of the following Canadian cities has the largest population?
- Labrador City
 - Quesnel
 - Twin Falls
 - Mississauga
55. What percentage of Canada is covered by forest?
- Twenty percent
 - Forty percent
 - Sixty percent
 - 80 percent

TRUE/FALSE

56. The world's longest highway is located in Canada.
57. The population of Greenland are citizens of Denmark.
58. Most of the east coast of the United States gets over 80 inches of rain per year.
59. Turks and Caicos Islands are a territory of Canada.
60. Mexico is part of the North American Free Trade Agreement.

Zoo Visitor Demographics and Comparison



Zoo Visitor Demographics and Comparison

61. What does the x axis represent?
- The year
 - The specific zoo
 - Number of visitors
 - None of the above
62. What does the darkest column represent?
- 2017
 - 2020
 - Central City Zoo
 - South Side
63. What year did Southside Zoo have the highest adult attendance?
- 2017
 - 2018
 - 2019
 - 2020
64. Which zoo had the highest child attendance over the entire time covered by the graph?
- Central City Zoo
 - Southside Zoo
 - Metropolitan Zoo
 - North County Zoo
65. In what year did overall attendance increase the most at North County Zoo compared to the previous year?
- 2017
 - 2018
 - 2019
 - 2020
66. How many different zoos are included in the data?
- 4
 - 6
 - 8
 - 16
67. Which zoo had the highest adult attendance in 2018?
- Central City Zoo
 - Southside Zoo
 - Metropolitan Zoo
 - North County Zoo
68. In how many years was adult attendance higher at Metropolitan Zoo than Southside Zoo?
- 0
 - 1
 - 2
 - 4
69. In how many years did Central City Zoo adult attendance exceed four thousand?
- 0
 - 1
 - 2
 - 4
70. Which zoo had the smallest difference between adult and child attendance in 2017?
- Central City Zoo
 - Southside Zoo
 - Metropolitan Zoo
 - North County Zoo
- TRUE/FALSE**
71. Central City Zoo had the highest attendance in both categories every year.
72. Child attendance was at least double adult attendance every year at Central City Zoo.
73. Total attendance at Metropolitan Zoo never exceeded 100,000 in a single year.
74. Adult attendance at Southside Zoo peaked in 2018.
75. The chart covers data from eight different zoos over four years.



University Interscholastic League
A+ Maps/Graphs/Charts Contest • 2022-2023
7/8 Invitational
Answer Key

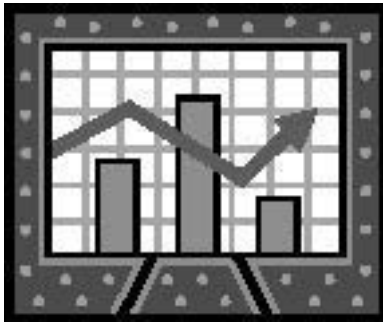
1. A	26. F	51. B
2. C	27. F	52. C
3. C	28. T	53. B
4. D	29. T	54. D
5. B	30. T	55. B
6. A	31. C	56. T
7. D	32. D	57. T
8. C	33. B	58. F
9. B	34. C	59. F
10. A	35. C	60. T
11. D	36. D	61. C
12. C	37. A	62. B
13. B	38. B	63. A
14. B	39. D	64. A
15. D	40. D	65. C
16. C	41. F	66. A
17. D	42. T	67. A
18. A	43. F	68. B
19. C	44. T	69. D
20. B	45. T	70. D
21. A	46. C	71. T
22. C	47. B	72. T
23. B	48. B	73. T
24. D	49. C	74. F
25. C	50. A	75. F

FALL/WINTER DISTRICT 2022-2023

A+ ACADEMICS



University Interscholastic League



Maps, Graphs & Charts

grades 7 & 8

**DO NOT OPEN TEST
UNTIL TOLD TO DO SO**

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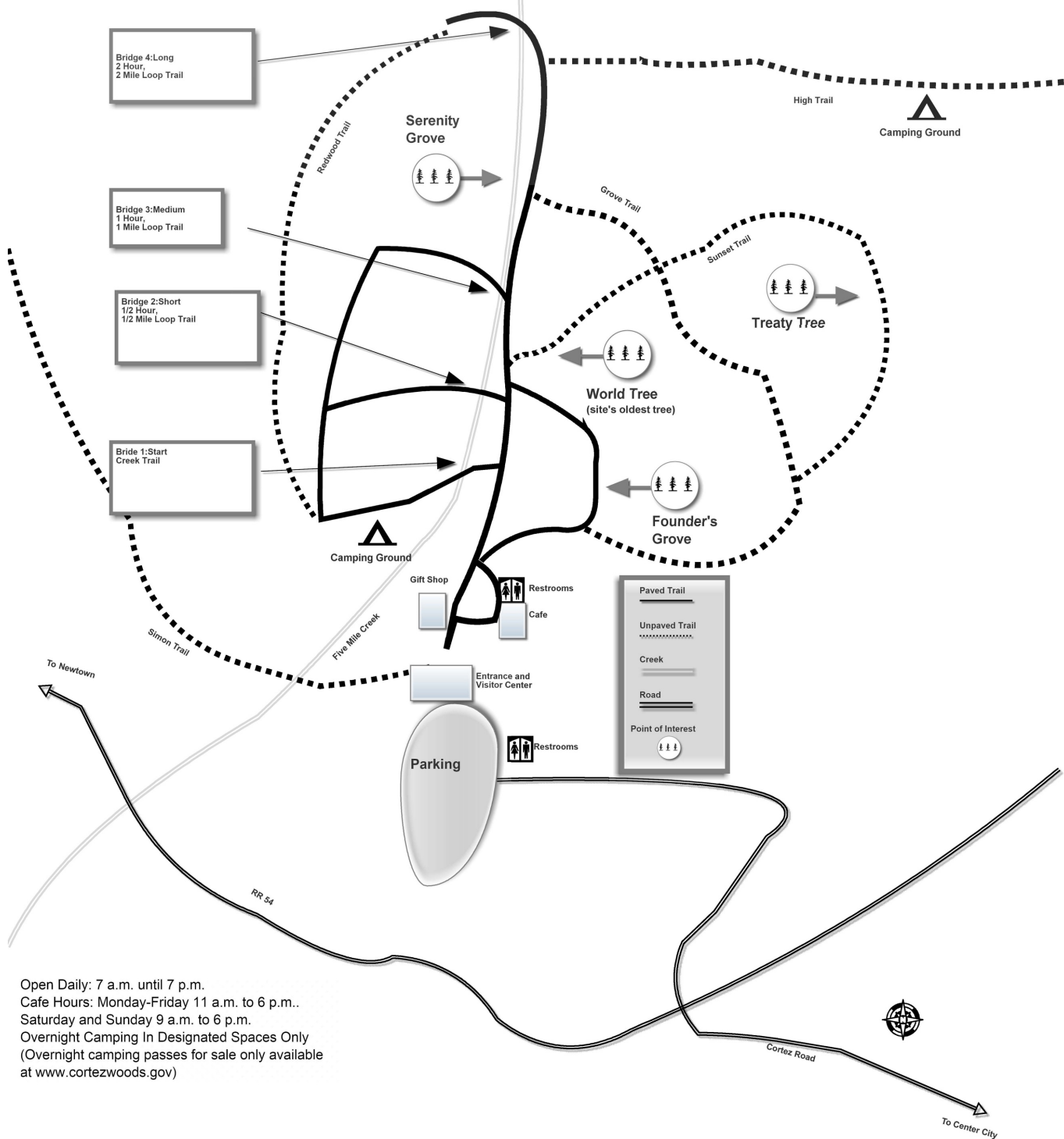
Africa

- How far is it from Bardai, Chad to Al Jawf, Libya?
 - About 350 kilometers
 - About 550 kilometers
 - About 750 kilometers
 - About 950 kilometers
- Which nation has the highest population growth?
 - Ethiopia
 - Niger
 - South Africa
 - The World
- Wetlands can be found in what country?
 - Algeria
 - Madagascar
 - Uganda
 - Tanzania
- What city with a population of over one million is on the shores of the Indian Ocean?
 - Beira, Mozambique
 - Durban, South Africa
 - Port Elizabeth, South Africa
 - None of the above
- The Atlas Mountains form the border between Algeria and what other country?
 - Libya
 - Mali
 - Morocco
 - Niger
- Mount Tahat is located in what country?
 - Algeria
 - South Africa
 - Ethiopia
 - None of the above
- Which of the following cities in Nigeria has the largest population?
 - Bauchi
 - Enugu
 - Ibadan
 - Iwo
- How long is the Great Rift Valley?
 - About 1,500 miles
 - About 2,500 miles
 - About 4,500 miles
 - About 6,500 miles
- The Niger River connects with what other river in central Nigeria?
 - Bani
 - Benue
 - Gambia
 - Nile
- What is the elevation level of Luanda, Angola?
 - Below sea level
 - 0-500 feet
 - 150-300 feet
 - 300 to 600 feet
- The largest urban area is in what part of the continent?
 - North
 - South
 - East
 - West
- What city is located at 9.14° N, 18.36° E?
 - Bangui, Central African Republic
 - Garoua, Cameroon
 - Sarh, Chad
 - None of the above
- Which city gets the most precipitation?
 - Buchanan, Liberia
 - Luxor, Egypt
 - Oran, Algeria
 - Port Elizabeth, South Africa
- Areas of urban land use can be found in what area of Algeria?
 - North
 - South
 - East
 - West
- Which country has the lowest incidence of AIDS?
 - Congo
 - Egypt
 - Mali
 - Namibia

Cortez Woods National Monument Forest

\$15.00-Adult (18 and older)
 \$10.00-Youth (13-17)
 Free- Children (12 and under)

Cortez Woods Annual Pass \$45.00 Pass is good for 12 months. It admits the pass holder and three persons (13 and older).

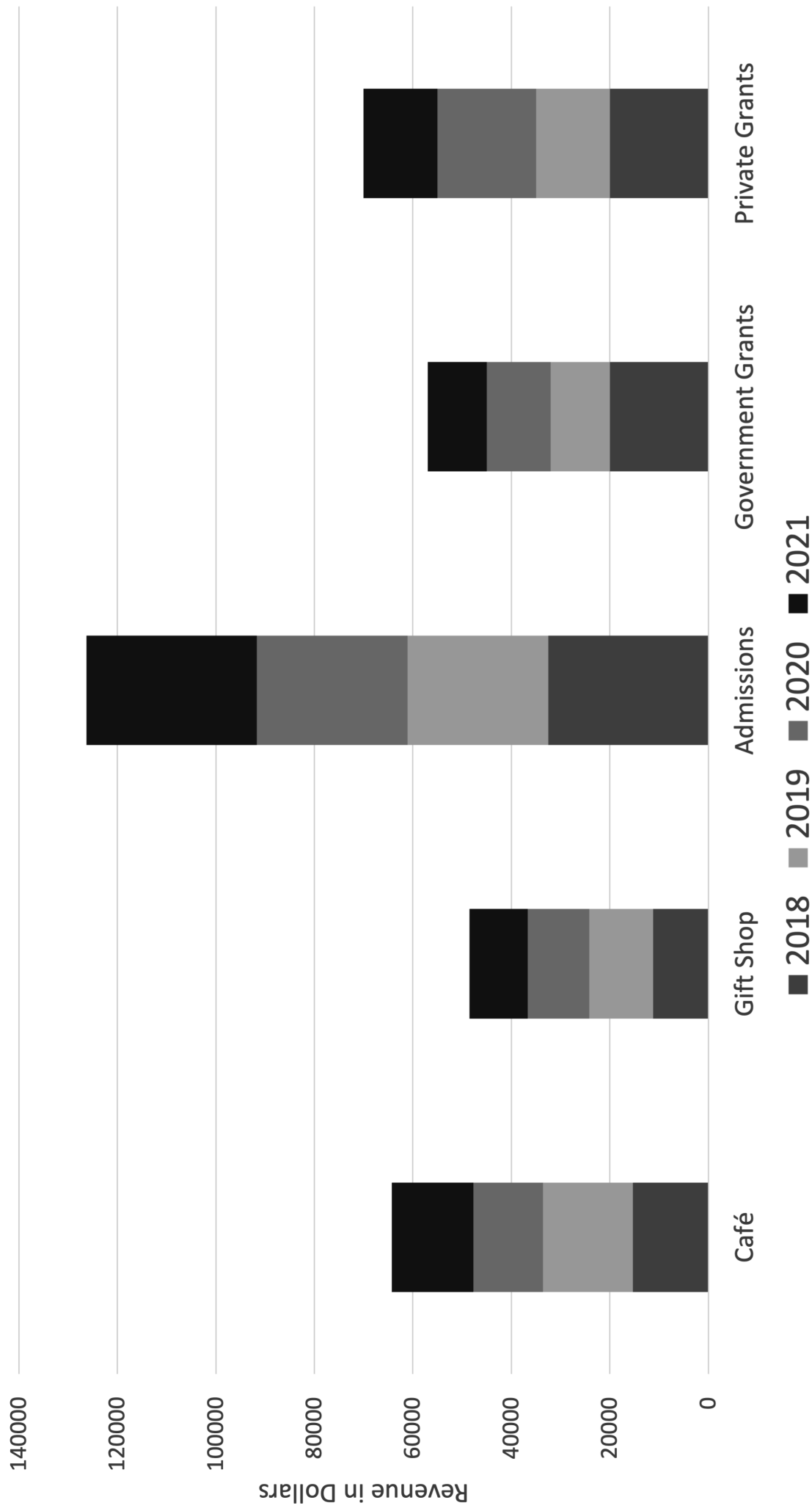


Open Daily: 7 a.m. until 7 p.m.
 Cafe Hours: Monday-Friday 11 a.m. to 6 p.m..
 Saturday and Sunday 9 a.m. to 6 p.m.
 Overnight Camping In Designated Spaces Only
 (Overnight camping passes for sale only available at www.cortezwoods.gov)

Cortez Woods

16. What does the light grey double line represent?
- Paved trail
 - Unpaved trail
 - Creek
 - Road
17. What time does the café close on weekends?
- 5 p.m.
 - 6 p.m.
 - 7 p.m.
 - Not indicated on map
18. Which trail runs mainly east and west?
- Simon Trail
 - RR 54
 - Redwood Trail
 - None of the above
19. How do visitors driving in reach the parking area?
- By heading southwest on RR 54
 - By heading northwest on RR 54
 - By heading southwest on Cortez Road
 - By heading northwest on Cortez Road
20. How many camping grounds are located west of the creek?
- 0
 - 1
 - 2
 - 3
21. Which point of interest is located closest to the entrance?
- Serenity Grove
 - World Tree
 - Treaty Tree
 - Founder's Grove
22. Which road leads to Newtown?
- Cortez Road
 - RR 54
 - Simon Trail
 - None of the above
23. Which bridge takes visitors on the longest paved trail loop?
- Bridge 2
 - Bridge 3
 - Bridge 4
 - Bridge 5
24. How many people over the age of twelve can enter daily on a single annual pass?
- 1
 - 2
 - 3
 - 4
25. How many unpaved trails cross the creek?
- 0
 - 1
 - 2
 - 4
- TRUE/FALSE**
26. The northern camping ground is accessible from a paved path.
27. Adult tickets cost twice as much as tickets for eighteen year olds.
28. The Cafe closes at 6 p.m. on Sundays.
29. Only three of the unpaved trails cross one another.
30. The Gift Shop is located directly across the creek from the café.

Cortez Woods Revenue By Year and Type



Cortez Woods Revenue

31. What does each differently shaded portion of a column represent?
- The year
 - Source of income
 - The amount of income
 - None of the above
32. In what year did government grants generate the most revenue?
- 2018
 - 2019
 - 2020
 - 2021
33. How many different sources of income are tracked on the graph?
- 0
 - 3
 - 4
 - 5
34. In what year did the gift shop generate the least amount of revenue?
- 2018
 - 2019
 - 2020
 - 2021
35. What single source of revenue generated the most money in 2019?
- Cafe
 - Gift Shop
 - Government Grants
 - Private Grants
36. In how many years was revenue from admissions at least twice the amount of every other single source?
- 0
 - 1
 - 3
 - 4
37. Which source of income generated the least amount of revenue over the time covered by the chart?
- Cafe
 - Gift Shop
 - Government Grants
 - Private Grants
38. What year is represented on the bottom section of each column?
- 2018
 - 2019
 - 2020
 - 2021
39. In how many years did the café generate more income than the gift shop?
- 0
 - 1
 - 3
 - 4
40. Which source of income had the highest drop from 2020 to 2021?
- Cafe
 - Gift Shop
 - Government Grants
 - Private Grants

TRUE/FALSE

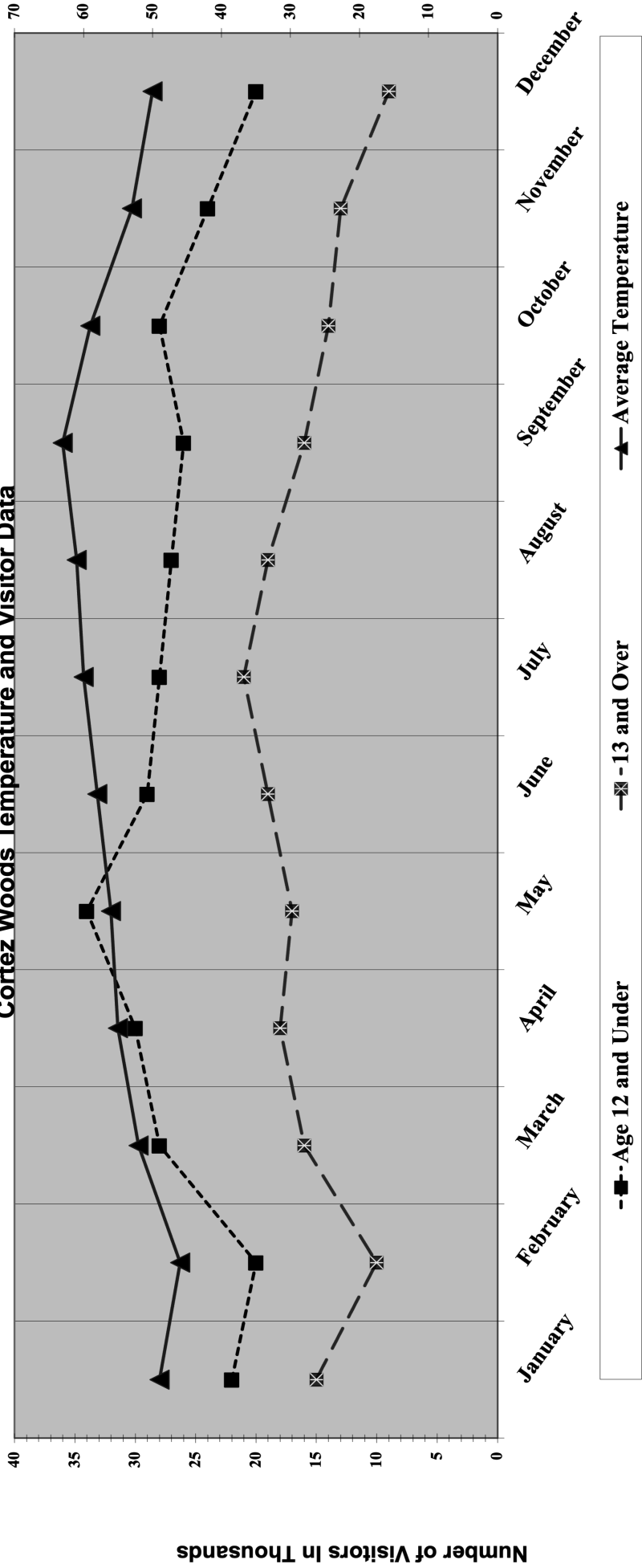
41. Government grants peaked in 2018.
42. Admissions pulled in the most revenue every year.
43. Private grants never fell below the level of government grants.
44. The gift shop is the only source of income that fell below \$10,000 in a single year.
45. Total revenue for all sources combined exceeded \$50,000 every year.

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South America

46. What is the main land cover type of the Amazon Basin?
- Cropland
 - Grassland
 - Broadleaf forest
 - Tropical rain forest
47. Which of the following crops is grown at the lowest elevation?
- Cacao
 - Coffee
 - Wheat
 - Barley
48. Which of the following countries has the highest percentage of indigenous South Americans?
- Brazil
 - Bolivia
 - Peru
 - Venezuela
49. What Brazilian city of over one million is located on the shores of the Amazon River?
- Fortaleza
 - Manaus
 - Porto Alegre
 - Santarem
50. San Ambrosio Island is a territory of what country?
- Brazil
 - Chile
 - Guyana
 - Uruguay
51. Which of the following country capitals is nearest the equator?
- Brazil
 - Colombia
 - Argentina
 - Ecuador
52. Tundra can be found in what country?
- Argentina
 - Bolivia
 - Chile
 - All of the above
53. Which of the following resources can be found in Guyana?
- Bauxite
 - Coal
 - Silver
 - Zinc
54. What is the population level of Cochabamba, Bolivia?
- Under 100,000
 - 100,00 to 500,000
 - 500,000 to 1,000,000
 - Over 1,000,000
55. How many species of plants, animals and insects disappear every day due to deforestation?
- Between 25 and 50
 - Between 50 and 100
 - Between 100 to 140
 - Over 200
- TRUE/FALSE**
56. Dry conditions in the Atacama Desert are caused by the warm Atlantic current.
57. Argentina is the largest country on the continent.
58. The Drake Passage is off the south coast of the continent.
59. Chile sends most of its exports to Japan.
60. The highest mountain peak on the continent is in Argentina.

Cortez Woods Temperature and Visitor Data



Number of Visitors in Thousands

Average Fahrenheit Temperature

Cortez Woods Temperature and Visitor Data

61. What does the line with the triangle represent?
- The year
 - Visitors 12 and under
 - Visitors 13 and over
 - Average temperature
62. What month is the coldest in Cortez Woods?
- January
 - February
 - October
 - November
63. What do the numbers on the left side of the y axis indicate?
- The year
 - The month
 - The amount of visitors in thousands
 - The temperature
64. What year does the data represent?
- 2018
 - 2019
 - 2020
 - Not indicated
65. In how many months were there more visitors thirteen and over than those twelve and under?
- 0
 - 1
 - 2
 - 4
66. What month had the highest combined visitors?
- March
 - May
 - August
 - October
67. Which month had the smallest difference between the two categories of visitors?
- January
 - April
 - September
 - December
68. How many months had increases in both sets of visitors compared to the previous month?
- 0
 - 1
 - 2
 - 4
69. In how many months did attendance for the twelve and under group fall below 2,500?
- 0
 - 1
 - 2
 - 4
70. What is the range between the highest and lowest average temperature?
- 12 degrees
 - 17 degrees
 - 22 degrees
 - 27 degrees

TRUE/FALSE

71. The highest temperature in a single day would have been 63 degrees.
72. Total attendance for the year for visitors twelve and under was above 300,000.
73. The month with the highest average temperature had the most visitors.
74. December was the month with the lowest attendance for 13 and over visitors.
75. Average temperatures fell every month after August.



University Interscholastic League
A+ Maps/Graphs/Charts Contest • 2022-2023
7/8 Fall/Winter District
Answer Key

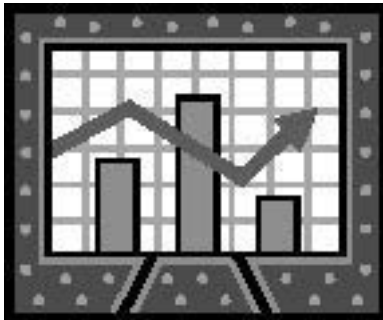
1. C	26. F	51. D
2. B	27. F	52. D
3. C	28. T	53. A
4. B	29. F	54. C
5. C	30. F	55. C
6. A	31. A	56. F
7. C	32. A	57. F
8. C	33. D	58. T
9. B	34. A	59. F
10. B	35. A	60. T
11. A	36. B	61. D
12. C	37. B	62. B
13. A	38. A	63. C
14. A	39. D	64. D
15. B	40. D	65. A
16. C	41. T	66. B
17. B	42. T	67. A
18. D	43. T	68. C
19. D	44. F	69. A
20. B	45. T	70. B
21. D	46. D	71. F
22. B	47. A	72. T
23. B	48. B	73. F
24. D	49. B	74. T
25. B	50. B	75. F

SPRING DISTRICT 2022-2023

A+ ACADEMICS



University Interscholastic League



Maps, Graphs & Charts

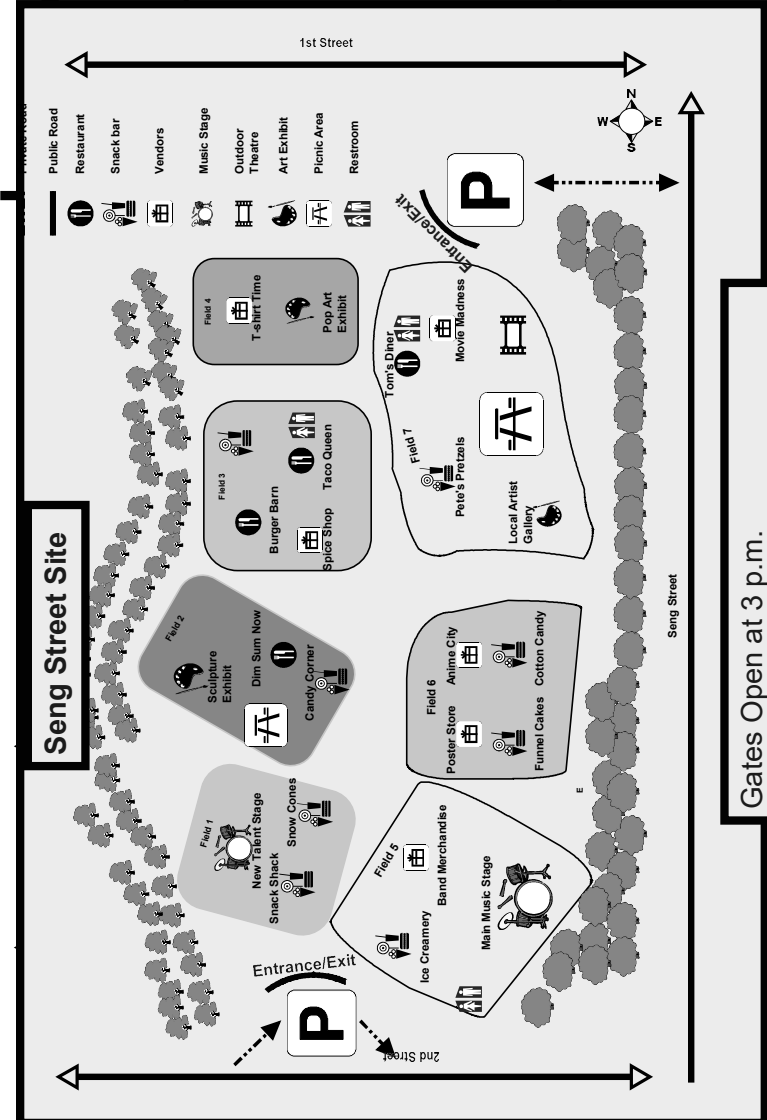
grades 7 & 8

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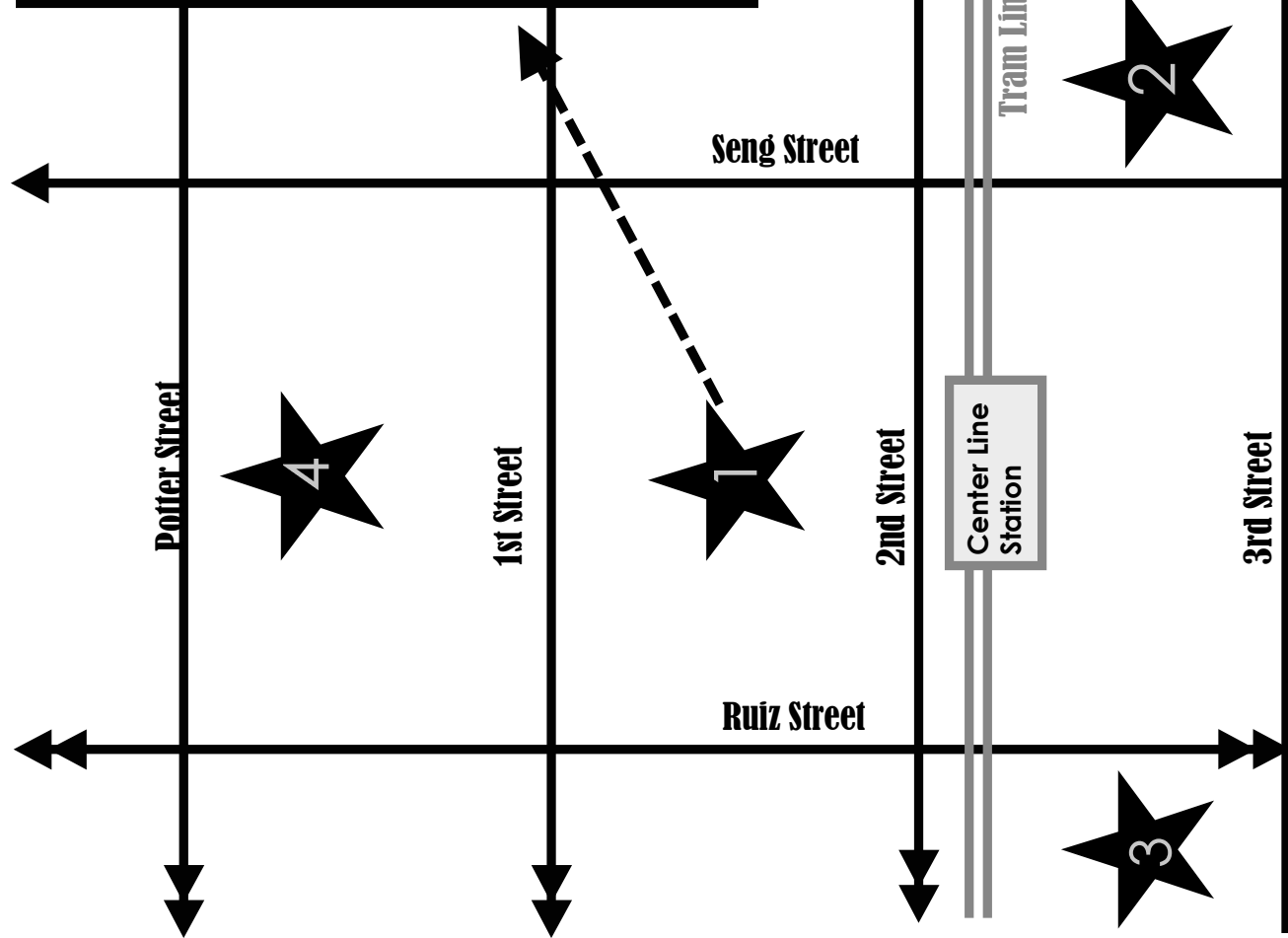
Asia

1. What is the population of Kobe, Japan?
 - a. Over 3,000,000
 - b. 1,000,000 to 3,000,000
 - c. Under 1,000,000
 - d. Under 100,000
2. What is the predominant religion in Thailand?
 - a. Christianity
 - b. Islam
 - c. Buddhism
 - d. Hinduism
3. Which of the following countries has the highest population density?
 - a. Oman
 - b. Kazakhstan
 - c. India
 - d. Turkey
4. The Dzungarian Basin is located in what country?
 - a. China
 - b. Kazakhstan
 - c. Iran
 - d. Pakistan
5. Where is the lowest land on earth located?
 - a. Israel
 - b. China
 - c. Russia
 - d. Turkey
6. How far is it from the capital of North Korea to the capital of South Korea?
 - a. About 200 miles
 - b. About 400 miles
 - c. About 200 kilometers
 - d. About 600 kilometers
7. What is the land cover type of Oman?
 - a. Cropland
 - b. Grassland
 - c. Tundra
 - d. Desert and semi-desert
8. Which country produces the most oil?
 - a. Norway
 - b. Nigeria
 - c. Kuwait
 - d. Russia
9. China has a disputed border with which of the following countries?
 - a. Japan
 - b. Laos
 - c. Tajikistan
 - d. India
10. What is the largest (by population) city in China?
 - a. Harbin
 - b. Shanghai
 - c. Fuzhou
 - d. Urumqi
11. What is the elevation of Mount Everest?
 - a. 5,000 to 10,000 feet
 - b. 10,000 to 20,000 feet
 - c. 20,000 to 30,000 feet
 - d. Over 30,000 feet
12. The capital of what country is located on the Tropic of Capricorn?
 - a. Oman
 - b. China
 - c. Iraq
 - d. None of the above
13. What body of water lies between Asia and Africa?
 - a. Caspian Sea
 - b. Sea of Okhotsk
 - c. Red Sea
 - d. All of the above
14. Nicobar Island is a territory of what nation?
 - a. China
 - b. Indonesia
 - c. India
 - d. Pakistan
15. What river marks the continental divide within two transnational countries?
 - a. Syr Darya River
 - b. Krishna River
 - c. Ural River
 - d. None of the above

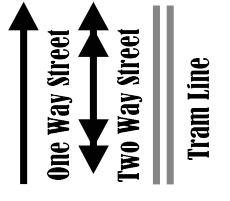
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Gates Open at 3 p.m.
 Live music from 4 p.m. to 10 p.m.
 Outdoor Cinema begins at sunset



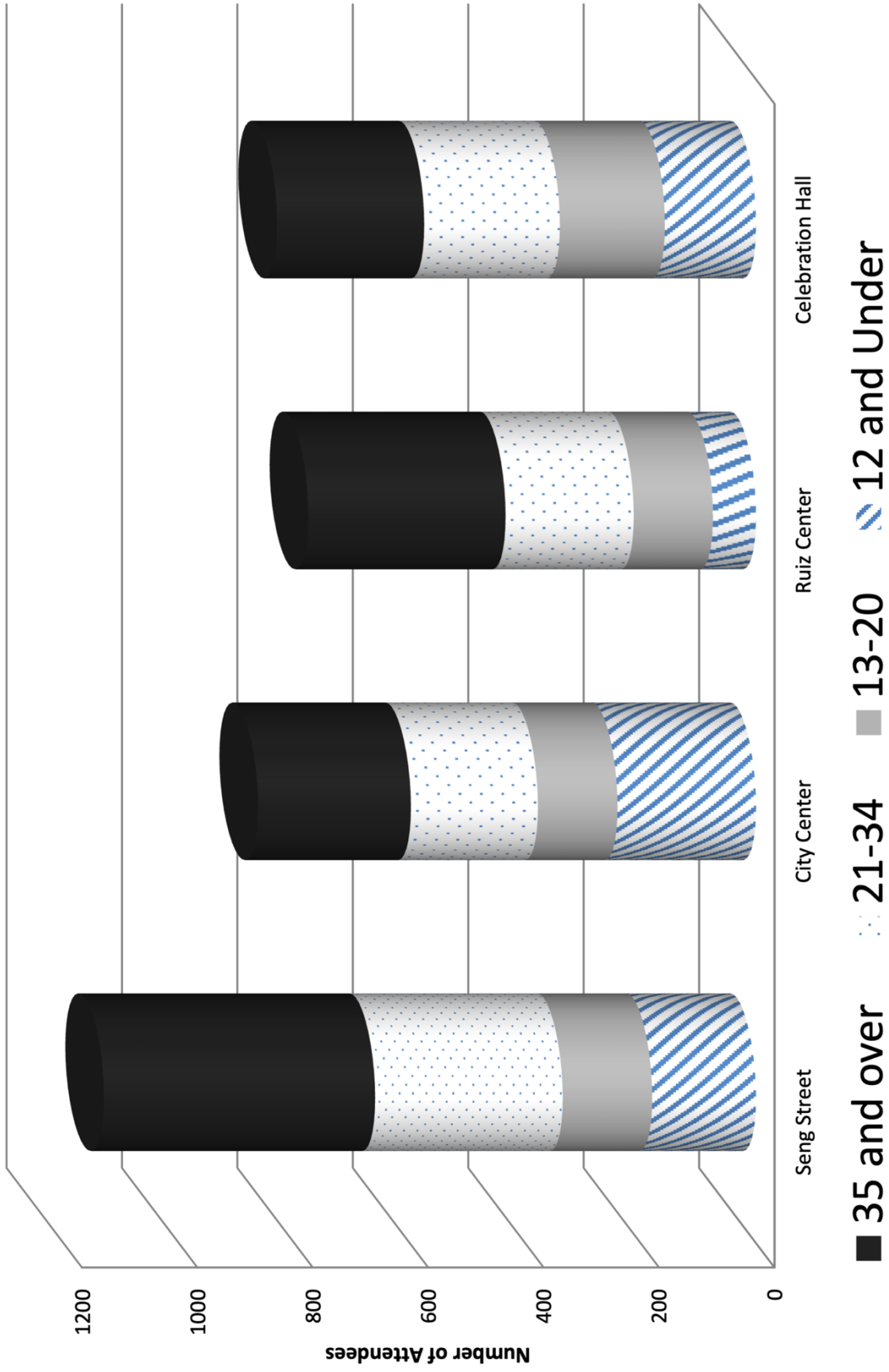
Center City Music, Food and Arts Festival
 Fridays through Saturdays during June
 Times and events vary by site



Center City Music, Food and Arts Festival

16. How many public one ways streets are indicated on the map?
- 0
 - 1
 - 2
 - 3
17. How many festival sites are indicated on the map?
- 1
 - 3
 - 4
 - 6
18. What direction does Seng Street run?
- North and South
 - North only
 - South only
 - Not indicated on the map
19. How many restaurants are at the Seng Street site?
- 0
 - 1
 - 2
 - 4
20. Over what amount of time will the festival be held?
- Three days
 - One month
 - One week
 - One year
21. Which site is the furthest west?
- Seng Street
 - City Center
 - Ruiz Event Center
 - Celebration Hall
22. From what street do visitors access the south parking lot at the Seng Street Site?
- 1st Street
 - 2nd Street
 - Seng Street
 - Potter Street
23. What time do gates open and close at the Ruiz Event Center?
- 3 p.m.
 - 4 p.m.
 - 5 p.m.
 - Not indicated on the map
24. How many music stages are at the Seng Street Site?
- 1
 - 2
 - 3
 - 4
25. Which of the following can be found at every field at the Seng Street Site?
- Snacks
 - Restaurants
 - Vendors
 - None of the above
- TRUE/FALSE**
26. The Central Line Station is located within one block of three of the festival sites.
27. Field 3 has the most restaurants.
28. There is a picnic area next to every restaurant at the Seng Street Site.
29. Movie Madness is the vendor that is located furthest south on the map.
30. The parking lots at the Seng Street site are accessed through public roads.

Art Festival Attendee Demographics by Site



Art Festival Attendee Demographics by Site

31. What does each column represent?
- The year
 - The specific site
 - The specific weekend
 - A particular age group
32. Which site had the highest number of total attendees?
- Seng Street
 - City Center
 - Ruiz Center
 - Celebration Hall
33. What amount of time does the chart cover?
- One week
 - One weekend
 - One year
 - Not indicated
34. Which age group had the highest amount of attendance at City Center?
- 12 and under
 - 13-20
 - 21-34
 - 35 and over
35. Which age group had the highest attendance for all sites combined?
- 12 and under
 - 13-20
 - 21-34
 - 35 and over
36. At how many sites did the 12 and under age group have the lowest attendance?
- 0
 - 1
 - 2
 - 3
37. How many age groups at City Center had attendance above 200?
- 0
 - 1
 - 2
 - 3
38. What does the top portion of each column represent?
- 12 and under age group
 - 13-20 age group
 - 21-34 age group
 - None of the above
39. How many age groups had the highest level of attendance at Seng Street?
- 0
 - 1
 - 2
 - 3
40. Which specified group had the highest attendance?
- 12 and under at City Center
 - 13-20 at City Center
 - 21-34 at Ruiz Center
 - 35 and over at Ruiz Center
- TRUE/FALSE**
41. All sites drew in at least 800 attendees.
42. City Center was the most popular site for the 12 and under age group.
43. No age group ever fell below 100 attendees at any site.
44. Seng Street had more than twice the number of attendees in the 35 and over group than Celebration Hall.
45. At Ruiz Center, the number of attendees increased with each older age group.

Europe

46. What amount of precipitation does Latvia receive?
- 10 to 20 inches per year
 - 20 to 40 inches per year
 - 40 to 80 inches per year
 - Over 80 inches per year
47. What body of water lies between Ireland and the United Kingdom?
- English Channel
 - Strait of Dover
 - St. George's Channel
 - North Sea
48. Which city in the United Kingdom has the largest population?
- Exeter
 - Sheffield
 - Plymouth
 - Portsmouth
49. The Cantabrian Mountains are located in what country?
- Russia
 - Norway
 - Spain
 - Italy
50. Which of the following countries is a candidate country for the European Union?
- France
 - Turkey
 - Finland
 - Belarus
51. What country's capital is located at 42°N, 45°E?
- Russia
 - Georgia
 - Iran
 - Armenia
52. Which of the following has the highest birth rate?
- Albania
 - France
 - Russia
 - The World
53. The Northern European Plain is located in what country?
- Ireland
 - Poland
 - Greece
 - Sweden
54. Which country gets the highest percentage of its energy from nuclear power?
- France
 - Finland
 - Germany
 - Norway
55. What do the solid purple lines on the Land Cover Map indicate?
- Changes in land cover type
 - International boundaries
 - Continental boundaries
 - Disputed or undefined boundaries

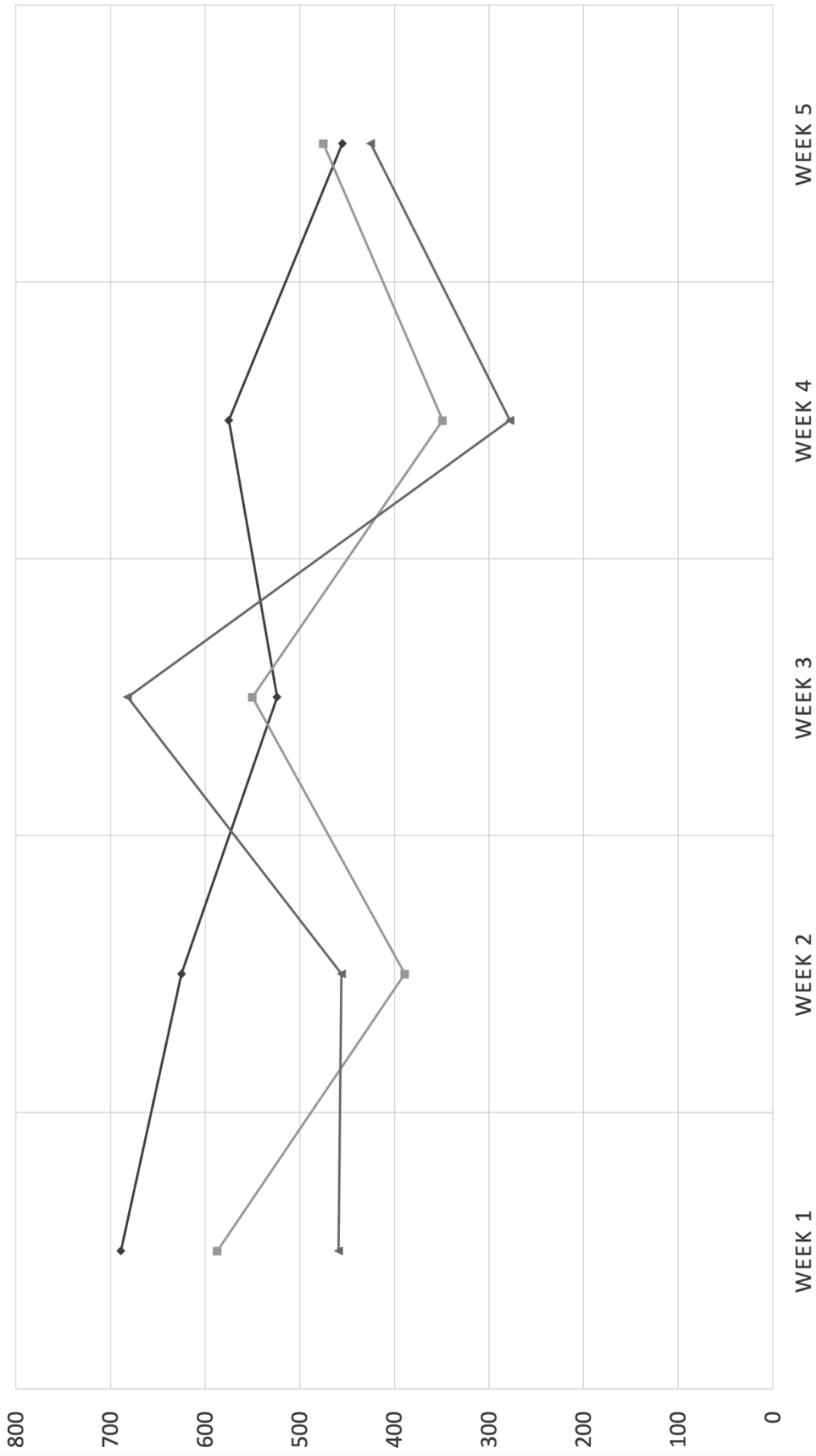
TRUE/FALSE

56. Southern Ireland is part of the United Kingdom
57. Reykjavik is the easternmost capital in Europe.
58. The second longest river in Europe flows through Slovakia.
59. The European Union gets most of its imports from the United States.
60. Bulgaria has a mostly marine climate

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ART FESTIVAL WEEKEND BADGE SALES

→ 2018 ■ 2019 ← 2020



Arts Festival Weekend Badge Sales

61. What amount of time does this graph cover?
- One weekend
 - Five weeks
 - One year
 - Three years
62. What does the darkest line (with a diamond marker) represent?
- Weekend 1
 - Weekend 2
 - 2018
 - 2019
63. What week did badge sales peak in 2018?
- Week 1
 - Week 2
 - Week 3
 - Week 4
64. In how many years did Week 1 see more badge sales than Week 5?
- 0
 - 1
 - 2
 - 3
65. Which year had the most badge sales?
- 2018
 - 2019
 - 2021
 - Not indicated
66. Which year generated the most revenue?
- 2018
 - 2019
 - 2021
 - Not indicated
67. In 2019, badge sales rose above 500 how many times?
- 0
 - 1
 - 2
 - 3
68. Over the time covered by the graph, what weekend had the least amount of badge sales?
- Week 1
 - Week 2
 - Week 3
 - Week 4
69. When did badge sales fall to their lowest point?
- Week 1 2019
 - Week 4 2020
 - Week 3 2018
 - Week 1 2019
70. What weekend had the least variation from year to year?
- Week 1
 - Week 2
 - Week 4
 - Week 5

TRUE/FALSE

71. Total sales in a year never fell below 2,000.
72. Week 1 badge sales fell every year.
73. Compared to other years, 2020 had the highest badge sales in only one weekend.
74. For all years combined, Week 3 had the most badge sales.
75. The x axis represents the year's data.



University Interscholastic League
A+ Maps/Graphs/Charts Contest • 2022-2023
7/8 Spring
Answer Key

1. B	26. T	51. B
2. C	27. T	52. D
3. C	28. F	53. B
4. A	29. F	54. A
5. A	30. F	55. B
6. C	31. B	56. F
7. D	32. A	57. F
8. D	33. D	58. T
9. D	34. D	59. F
10. B	35. D	60. F
11. C	36. C	61. D
12. D	37. D	62. C
13. C	38. D	63. A
14. C	39. C	64. D
15. C	40. D	65. A
16. D	41. F	66. D
17. C	42. T	67. C
18. B	43. F	68. D
19. D	44. F	69. B
20. B	45. T	70. D
21. D	46. B	71. T
22. B	47. C	72. T
23. D	48. B	73. T
24. B	49. C	74. T
25. D	50. B	75. F

CONTESTANT NUMBER:

FOR GRADER USE ONLY

Score Test Below:

_____ out of 250. Initials _____

_____ out of 250. Initials _____

Papers contending to place:

_____ out of 250. Initials _____



**University Interscholastic League
A+ Mathematics Contest • Answer Sheet**

Write your contestant number in the upper right corner, and circle your grade below.

Circle Grade Level: 6 7 8

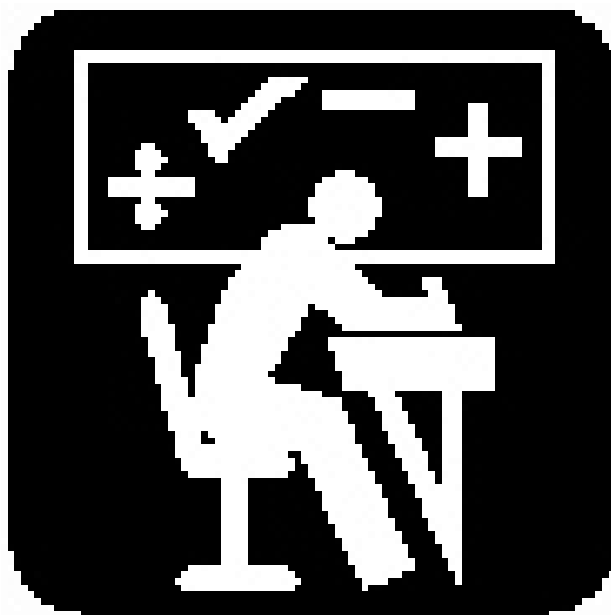
- | | |
|---------------|---------------|
| 1. A B C D E | 26. A B C D E |
| 2. A B C D E | 27. A B C D E |
| 3. A B C D E | 28. A B C D E |
| 4. A B C D E | 29. A B C D E |
| 5. A B C D E | 30. A B C D E |
| 6. A B C D E | 31. A B C D E |
| 7. A B C D E | 32. A B C D E |
| 8. A B C D E | 33. A B C D E |
| 9. A B C D E | 34. A B C D E |
| 10. A B C D E | 35. A B C D E |
| 11. A B C D E | 36. A B C D E |
| 12. A B C D E | 37. A B C D E |
| 13. A B C D E | 38. A B C D E |
| 14. A B C D E | 39. A B C D E |
| 15. A B C D E | 40. A B C D E |
| 16. A B C D E | 41. A B C D E |
| 17. A B C D E | 42. A B C D E |
| 18. A B C D E | 43. A B C D E |
| 19. A B C D E | 44. A B C D E |
| 20. A B C D E | 45. A B C D E |
| 21. A B C D E | 46. A B C D E |
| 22. A B C D E | 47. A B C D E |
| 23. A B C D E | 48. A B C D E |
| 24. A B C D E | 49. A B C D E |
| 25. A B C D E | 50. A B C D E |

INVITATIONAL 2022-2023

A+ ACADEMICS



University Interscholastic League

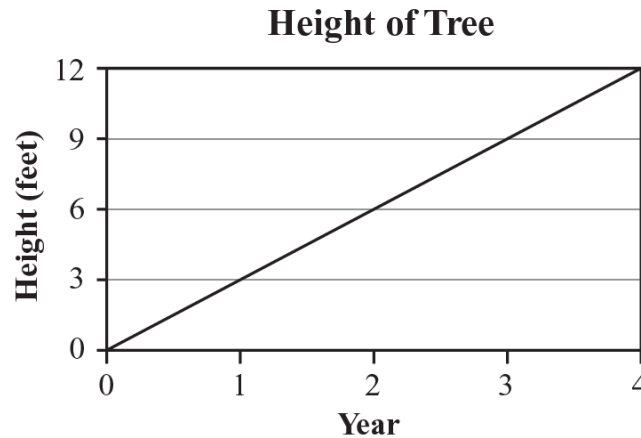


Mathematics

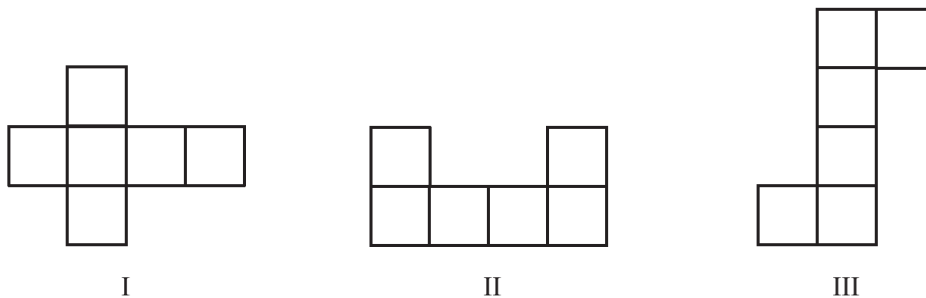
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2022 – 2023 University Interscholastic League JH/MS Mathematics Contest A

- (1) Evaluate: $36^{-0.5} - \frac{1}{4} + 2 \div 3$.
- A) $\frac{7}{12}$ B) $\frac{5}{6}$ C) $\frac{23}{36}$ D) $-5\frac{7}{12}$ E) $1\frac{2}{3}$
- (2) $1 - 2 + 3 - 4 + 5 - 6 + 7 - 8 + 9 - 10 =$
- A) 25 B) -5 C) 5 D) 30 E) None of these
- (3) Beth has $\frac{3}{4}$ pound of blueberries to make smoothies. She made the first batch with $\frac{1}{8}$ pound of the blueberries. How many pounds of blueberries were left?
- A) $\frac{3}{32}$ B) $\frac{5}{8}$ C) $\frac{3}{4}$ D) $\frac{7}{8}$ E) $\frac{1}{2}$
- (4) If the equation below is true, which of the following must also be true?
 $A - B = C$
- A) $A - C = B$ B) $C + A = B$ C) $B - A = C$ D) $A + C = B$ E) $C - B = A$
- (5) Genny planted a tree in her yard 4 years ago. She has recorded the height each year, which is shown in the line graph below. Based on the graph, how tall will the tree be in the 6th year?



- A) 13 feet B) 15 feet C) 16 feet D) 18 feet E) 20 feet
- (6) Which of these nets below, when folded, can produce a cube with no overlapping sides?

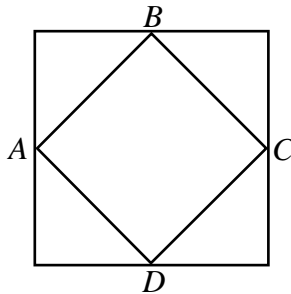


- A) I only B) II only C) I and III D) II and III E) All of them

- (7) Four tenths plus two hundredths plus six thousandths equals what decimal?
 A) 0.012 B) 0.066 C) 0.12 D) 0.24 E) 0.426

- (8) $\frac{3}{2} \times \frac{4}{3} \times \frac{5}{4} \times \frac{6}{5} \dots \times \frac{2022}{2021} = ?$
 A) 1 B) 1010 C) 1011 D) 2021 E) 2022

- (9) Points A , B , C and D are midpoints of the sides of the larger square shown below. If the larger square has area 60, what is the area of the smaller square?

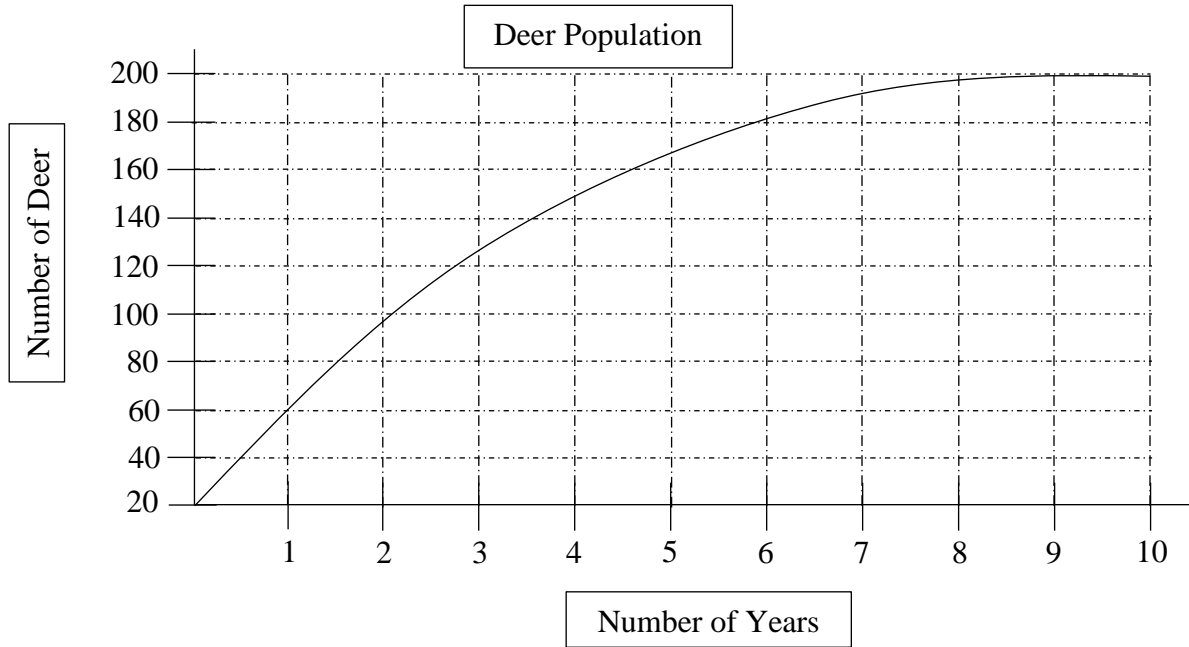


- A) 15 B) 20 C) 24 D) 30 E) 40
- (10) $\frac{1}{10} + \frac{2}{10} + \frac{3}{10} + \dots + 1 = ?$
 A) $4\frac{3}{5}$ B) $5\frac{1}{2}$ C) $5\frac{3}{4}$ D) 6 E) 10
- (11) $12^4 \div 5$ has a remainder of
 A) 0 B) 1 C) 2 D) 3 E) 4
- (12) 29 % of what is equal to $7\frac{1}{4} \times 16\%$?
 A) 16 B) 8 C) 4 D) 2 E) 1
- (13) How many two-digit numbers less than 50 have digits whose sum is a perfect square?
 A) 12 B) 11 C) 10 D) 9 E) 8
- (14) If two numbers differ by 4 and their sum is 14, what is the product of the two numbers?
 A) 9 B) 45 C) 36 D) 56 E) 70
- (15) The mean of 13, 25, 30, and 36 is
 A) 24 B) 25 C) 26 D) $26\frac{1}{4}$ E) 27
- (16) What is the sum of the prime integers between 11 and 20?
 A) 32 B) 39 C) 42 D) 47 E) 49
- (17) If $x - y = 3$ and $x + y = 12$, then $x^2 - y^2 =$
 A) 15 B) 9 C) 81 D) 36 E) 72

- (18) $98^2 - 4 =$
 A) 9600 B) 1960 C) 9984 D) 9216 E) None of these
- (19) What is the slope of the straight line $\frac{2}{3}x - 4y = 1$?
 A) $\frac{1}{4}$ B) $\frac{1}{3}$ C) $\frac{1}{6}$ D) $\frac{1}{2}$ E) $\frac{1}{12}$
- (20) 4 gallons + 12 pints = _____quarts.
 A) 18 B) 20 C) 22 D) 24 E) 30
- (21) If one dozen peaches cost \$12.84, then 4 peaches would cost
 A) \$3.76 B) \$3.88 C) \$4.18 D) \$4.24 E) None of these
- (22) 11101 (base 2) = _____(base 8).
 A) 15 B) 40 C) 31 D) 35 E) 41
- (23) What is the largest number that will divide evenly (no remainder) into the three numbers: 24, 40 and 64?
 A) 2 B) 4 C) 8 D) 12 E) 16
- (24) 267419 divided by 11 has a remainder of
 A) 2 B) 5 C) 6 D) 10 E) None of these
- (25) When a fair six-sided die is tossed on a tabletop, the bottom face cannot be seen. What is the probability that the product of the numbers on the five faces that can be seen is divisible by 6?
 A) $\frac{1}{3}$ B) $\frac{1}{2}$ C) $\frac{2}{3}$ D) $\frac{5}{6}$ E) 1
- (26) If 20% of a number is 12, what is 30% of the same number?
 A) 15 B) 18 C) 20 D) 24 E) 30
- (27) What is the greatest common factor (GCF) of the two terms below?
 $3x^2y$ and $12xy^2$
 A) $3x^2y^2$ B) $3xy$ C) $12xy$ D) $12x^2y^2$ E) $12x^3y^3$
- (28) Find the smallest positive integral value for k such that $374k$ is divisible by 6.
 A) 0 B) 1 C) 2 D) 3 E) 4
- (29) What is the unit's digits for 13^{77} ?
 A) 3 B) 7 C) 9 D) 5 E) 1
- (30) MDII + CX = _____ Arabic Numeral.
 A) 1,216 B) 1,521 C) 1,110 D) 1,612 E) 1,608
- (31) If $2x + 9 = 7 + 4x$, then $4x - 1 =$
 A) 3 B) 5 C) 2 D) 4 E) None of these
- (32) $(2.6)^2 \div (1.3)^2 \times (2.5)^2 =$
 A) 5 B) 10 C) 12.5 D) 15 E) 25

- (33) $1.181818\dots =$ _____ (common fraction)
 A) $\frac{13}{11}$ B) $\frac{2}{13}$ C) $\frac{2}{11}$ D) $\frac{6}{5}$ E) $\frac{5}{6}$

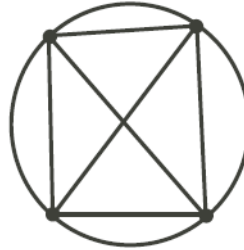
Twenty deer of both sexes were relocated to a high-fenced 100-acre property that contained enough forage to support 200 deer. Dan kept track of the number of deer and created a graph of the total deer population over a 10-year period. Answer questions 34 – 38 based on this graph.



- (34) During what year did the population of deer grow the least?
 A) year 10 B) year 1 C) year 3 D) year 9 E) year 2
- (35) During the first year, by what percentage did the population of deer grow?
 A) 40% B) 60% C) 200% D) 300% E) 600%
- (36) The deer population grew approximately by how many during the 5th year?
 A) 10 deer B) 20 deer C) 30 deer D) 170 deer E) 180 deer
- (37) What is the slope of the graph during the first year?
 A) 60 B) $\frac{1}{60}$ C) 40 D) $\frac{1}{40}$ E) $\frac{1}{20}$
- (38) How many more deer were there at the end of the 9th year than there were at the end of the 1st year?
 A) 200 B) 180 C) 160 D) 140 E) 120
- (39) 345 (base 6) – 154 (base 6) = _____ (base 6).
 A) 151 B) 251 C) 161 D) 261 E) 211
- (40) What is the twelfth triangular number?
 A) 144 B) 78 C) 12 D) 156 E) None of these

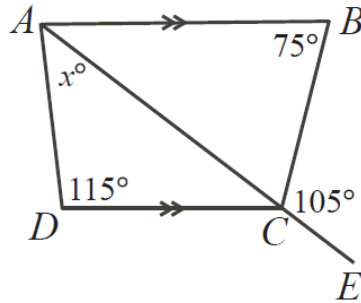
- (41) $0.41666\dots - 0.1666\dots =$
 A) $\frac{1}{4}$ B) $\frac{2}{3}$ C) $\frac{1}{3}$ D) $\frac{1}{6}$ E) $\frac{7}{12}$

- (42) Distinct points are placed on a circle. Each pair of points is joined with a line segment. An example with 4 points and six line segments is shown below. If 8 distinct points are placed on a circle, how many line segments would there be?



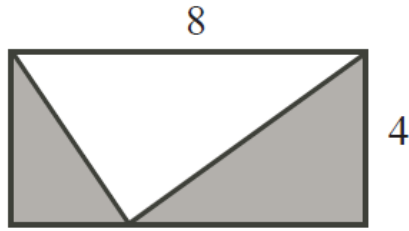
- A) 21 B) 27 C) 28 D) 36 E) 56

- (43) In the diagram below, AB is parallel to DC and ACE is a straight line. What is the value of x ?



- A) 30° B) 35° C) 40° D) 45° E) 50°
- (44) A bicycle travels at a constant speed of 15 km/h. A bus starts 195 km behind the bicycle and catches up to the bicycle in 3 hours. What is the average speed of the bus in km/h?
 A) 50 km/h B) 60 km/h C) 65 km/h D) 70 km/h E) 80 km/h
- (45) Mackenzie lists the numbers 3, 4, 5, 6, 7, 8, and 9. In her list, what is the ratio of the number of prime numbers to the number of composite numbers?
 A) 3 : 4 B) 5 : 2 C) 2 : 5 D) 3 : 7 E) 1 : 6
- (46) The mean (average) of a set of six numbers is 10. If the number 25 is removed from the set, what is the mean of the remaining numbers?
 A) 6 B) 7 C) 8 D) 9 E) 10
- (47) Two 5-digit positive integers are formed using each of the digits from 0 through 9 once. What is the smallest possible positive difference between the two integers?
 A) 229 B) 247 C) 249 D) 269 E) 469
- (48) If a pyramid has a square base, how many edges does the pyramid have?
 A) 3 B) 5 C) 6 D) 8 E) 12

- (49) The rectangle shown below has side lengths of 8 and 4. What is the area of the shaded part?



- A) 4 B) 12 C) 16 D) 32 E) 64
- (50) A pizza parlor prepared 39 pizzas to deliver. The first person delivered 7 pizzas and placed the rest of the pizza boxes on 4 shelves equally. Which equation could be used to find n , the total number of pizza boxes she put onto each shelf?
- A) $n = (39 + 7) \div 3$
B) $n = 39 - 7 \div 4$
C) $n = 39 + (7 \times 4)$
D) $n = (39 - 7) \div 4$
E) $n = -39 - (7 \times 4)$

2022 – 2023 University Interscholastic League JH/MS Mathematics Contest A – Key

- (1) A
- (2) B
- (3) B
- (4) A
- (5) D
- (6) C
- (7) E
- (8) C
- (9) D
- (10) B
- (11) B
- (12) C
- (13) D
- (14) B
- (15) C
- (16) E
- (17) D
- (18) A
- (19) C
- (20) C
- (21) E (\$4.28)
- (22) D
- (23) C
- (24) E (9)
- (25) E

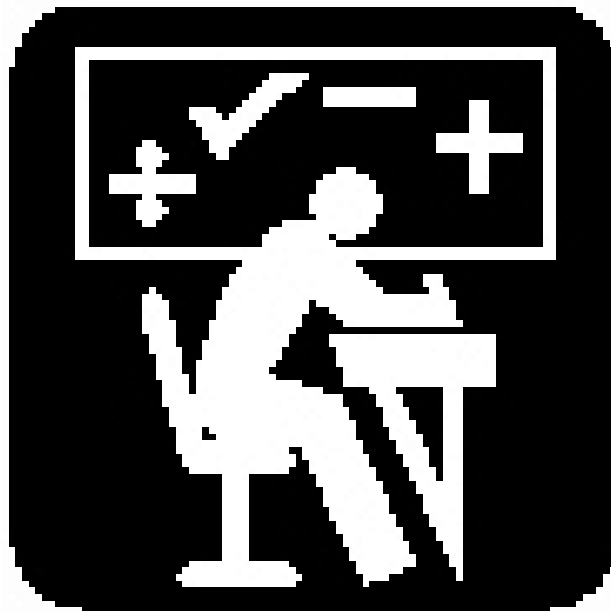
- (26) B
- (27) B
- (28) E
- (29) B
- (30) D
- (31) A
- (32) E
- (33) A
- (34) A
- (35) C
- (36) B
- (37) C
- (38) D
- (39) A
- (40) B
- (41) A
- (42) C
- (43) B
- (44) E
- (45) A
- (46) B
- (47) B
- (48) D
- (49) C
- (50) D

FALL/WINTER DISTRICT 2022-2023

A+ ACADEMICS



University Interscholastic League



Mathematics

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2022 – 2023 University Interscholastic League JH/MS Mathematics Contest B

- (1) Evaluate: $12 \times (0.5)^{-1} \div 4$.
- A) 24 B) $1\frac{1}{2}$ C) $1\frac{1}{4}$ D) -6 E) 6
- (2) $\frac{1}{2} \times \frac{2}{3} \times \frac{3}{4} \times \frac{4}{5} =$
- A) $\frac{1}{10}$ B) 1 C) $\frac{1}{5}$ D) $\frac{1}{4}$ E) 5
- (3) $0.25\% =$ _____ (common fraction)
- A) $\frac{1}{250}$ B) $\frac{1}{25}$ C) $\frac{1}{4}$ D) $\frac{1}{400}$ E) $\frac{1}{40}$
- (4) Which of the statements below is an example of the associative property?
- A) $X + Y = Y + X$
B) $2(X + Y) = 2X + 2Y$
C) $X^{-1} = \frac{1}{X}$
D) $X + (Y + Z) = (X + Y) + Z$
E) $X \times \frac{1}{X} = 1$
- (5) Each month Noah saved the money he earned for doing different jobs in his piggy bank every time he got paid. Based on the graph below, how much should he earn total for June, July, and August?



- A) \$50 B) \$125 C) \$225 D) \$250 E) \$275
- (6) What is 6050.287 rounded to the nearest ten?
- A) 6050 B) 6100 C) 650.29 D) 650.3 E) None of these
- (7) What is 40% of 250?
- A) 50 B) 100 C) 150 D) 200 E) 1,000
- (8) $6\frac{1}{4} \times 16 =$
- A) 100 B) 96 C) 116 D) 98 E) 112

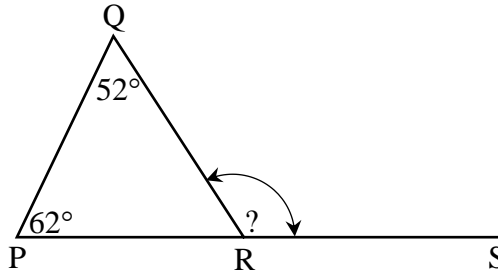
- (9) Javier buys 5 pounds of apples at 75¢ per pound and uses a 20% off coupon when he purchases the apples. What is the total amount he paid for the apples?
 A) \$3.75 B) \$7.50 C) \$4.50 D) \$2.75 E) \$3.00
- (10) $\frac{3}{2} \times \frac{4}{3} \times \frac{5}{4} \times \frac{6}{5} \dots \times \frac{2024}{2023} = ?$
 A) 1,012 B) 2,012 C) 1,101 D) 2,201 E) 2,022
- (11) What value for w makes this equation true?

$$5 \times w = (5 \times 20) + (5 \times 3)$$

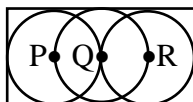
 A) 3 B) 20 C) 23 D) 27 E) 203
- (12) $\frac{1}{10} + \frac{3}{10} + \frac{1}{2} + \frac{7}{10} \dots + \frac{13}{10} = ?$
 A) $3\frac{3}{5}$ B) $4\frac{9}{10}$ C) $4\frac{3}{5}$ D) $\frac{3}{5}$ E) $3\frac{9}{10}$
- (13) $10^7 \div 7$ has a remainder of
 A) 1 B) 2 C) 3 D) 4 E) 5
- (14) $33\frac{1}{4}\%$ of 28 is equal to $16\frac{5}{8}\%$ of what?
 A) 56 B) 36 C) 14 D) 2 E) 1
- (15) What is the sum of the unique prime factors of 24?
 A) 5 B) 6 C) 7 D) 9 E) 10
- (16) A whole number squared times itself is 216. What is the number?
 A) 4 B) 5 C) 6 D) 16 E) 36
- (17) The median of 13, 25, 29, and 36 is
 A) $25\frac{3}{4}$ B) 26 C) $26\frac{1}{4}$ D) $26\frac{3}{4}$ E) 27
- (18) What is the largest prime number less than 40?
 A) 23 B) 29 C) 31 D) 37 E) 39
- (19) If $x = 21$, then $x^2 - 26x + 169 =$
 A) 64 B) 56 C) 49 D) 42 E) 36
- (20) $98^2 + 14^2 =$
 A) 9,600 B) 1,960 C) 9,604 D) 1,120 E) None of these
- (21) 65 (base 10) = _____ (base 3).
 A) 212 B) 2012 C) 2102 D) 21 remainder 3 E) 23
- (22) What is the smallest number that the three numbers: 12, 24 and 16, can divide evenly into?
 A) 2 B) 48 C) 8 D) 72 E) 192

- (23) What is the slope of the straight line $\frac{2}{3}x - 6y = 12$?
- A) $\frac{1}{9}$ B) $\frac{1}{4}$ C) $-\frac{1}{4}$ D) $-\frac{1}{2}$ E) $\frac{1}{12}$
- (24) Paige has 5 classical CDs, 4 jazz CDs, and 11 rock CDs. If she randomly selects one CD from her collection to play, what is the probability that it is a classical CD?
- A) 0.20 B) 0.44 C) 0.55 D) 0.80 E) 0.25
- (25) In how many ways can you arrange 5 books on a shelf?
- A) 5 B) 10 C) 25 D) 125 E) None of these
- (26) What is the remainder when 3857596 is divided by 11?
- A) 2 B) 5 C) 6 D) 8 E) 9
- (27) Genny's candy jar contains 6 peppermint candies, 3 spearmint candies, and 3 wintergreen candies. The first candy she randomly picks from the jar is wintergreen. If it is not replaced, what is the probability the second candy she randomly picks from the jar will also be wintergreen?
- A) $\frac{1}{12}$ B) $\frac{1}{6}$ C) $\frac{1}{3}$ D) $\frac{1}{11}$ E) $\frac{2}{11}$

- (28) Based on the angles given in the drawing below, what is the measure of $\angle QRS$?



- A) 118° B) 114° C) 112° D) 66° E) 57°
- (29) What is the least common Multiple (LCM) for the two terms below?
- $8x^2y$ and $12x^3y^2$**
- A) $2x^2y^2$ B) $2xy$ C) $12xy$ D) $2x^3y^2$ E) $24x^3y^2$
- (30) Find the smallest positive integral value for k such that $574k2$ is divisible by 4.
- A) 9 B) 7 C) 5 D) 3 E) 1
- (31) What is the unit's digit for 15^6 ?
- A) 1 B) 7 C) 9 D) 5 E) 0
- (32) Three congruent circles with centers P, Q and R are tangent to the sides of rectangle as shown below. The circle centered at Q has diameter 4 and passes through points P and R. What is the area of the rectangle?

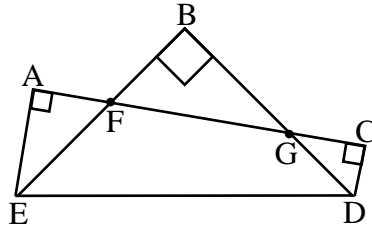


- A) 16 B) 24 C) 32 D) 64 E) 128

- (33) If $2x + y = 6$ and $3x - y = 14$, then $xy =$
 A) -8 B) -6 C) 8 D) 6 E) None of these

- (34) $(9.0)^2 \div (1.8)^2 \times (1.2)^2 =$
 A) 2.4 B) 36 C) 6 D) 24 E) 300

- (35) In the figure below $\angle A$, $\angle B$, and $\angle C$ are each right angles. If $\angle AEB$ is 40° and $\angle BED = \angle BDE$, then what does $\angle CDE$ equal?



- A) 75° B) 80° C) 85° D) 90° E) 95°

- (36) $1.41666\dots =$ _____ (common fraction)
 A) $\frac{7}{12}$ B) $\frac{5}{12}$ C) $\frac{17}{12}$ D) $\frac{16}{9}$ E) $\frac{17}{9}$

- (37) 33 (base 4) + 44 (base 5) + 55 (base 6) = _____ (base 10).
 A) 132 B) 131 C) 39 D) 74 E) 75

- (38) What is the sum of the seventh and eighth triangular numbers?
 A) 15 B) 225 C) 56 D) 64 E) None of these

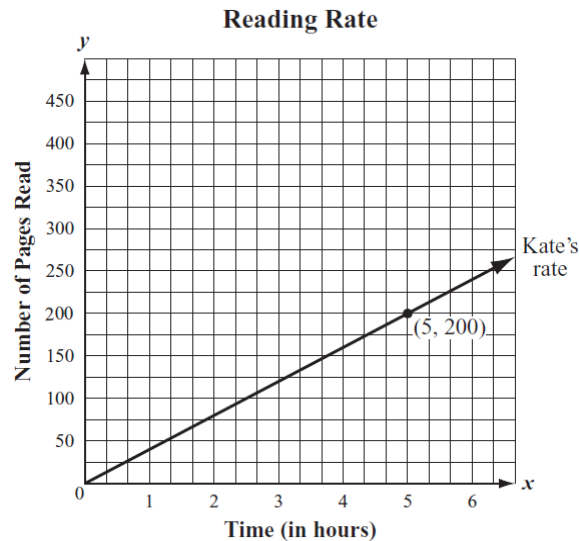
- (39) What is the 100th digit to the right of the decimal point in the decimal form of $\frac{4}{37}$?
 A) 0 B) 1 C) 3 D) 8 E) 9

- (40) Students from three middle schools worked on a summer project.
 Seven students from Obama Middle School worked for 3 days.
 Four students from Lincoln Middle School worked for 5 days.
 Five students from Richards Middle School worked for 9 days.
 The total amount paid for the students' work was \$774. Assuming each student received the same amount for a day's work, how much did the students from Lincoln Middle School earn altogether?
 A) \$9.00 B) \$48.38 C) \$180.00 D) \$193.50 E) \$258.00

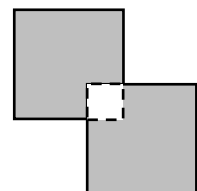
- (41) Suppose a new operation, \heartsuit , is defined so that $a \heartsuit b = a + b^2$. What is $(2 \heartsuit 3) \heartsuit 4$ equal?
 A) 27 B) 9 C) 21 D) 41 E) 29

- (42) Which of the following statements is false?
 A) Every number that is odd has a factor of 3.
 B) Every prime number has exactly two factors.
 C) Every perfect square has an odd number of factors.
 D) Every number that has 8 as a factor also has 4 as a factor.
 E) Every composite number can be written as the product of prime numbers.

Kate is reading a 500-page book. The graph below represents the relationship between the number of hours Kate has spent reading and the number of pages she has read. Please use this information plus the graph to answer questions 43 – 46.



- (43) At what rate, in pages per hour (Pgs/hr), is Kate reading?
 A) $\frac{1}{4}$ Pg/hr B) 50 Pgs/hr C) 4 Pgs/hr D) 40 Pgs/hr E) 75 Pgs/hr
- (44) What is the total amount of time, in hours, it will take Kate to read the entire 500-page book?
 A) 11 hrs. 20 min. B) 12 hrs. C) 12 hrs. 30 min. D) 12 hrs. 45 min. E) 14 hrs.
- (45) At her reading rate, how long does it take Kate to read a single page?
 A) 40 seconds B) 30 seconds C) 20 seconds D) 15 seconds E) 10 seconds
- (46) Maryanne decides to read the same book later. If she can read at a rate that is 25% greater than Kate, how long should it take her to finish reading the book?
 A) 10 hours B) 11 hours C) 11 hrs. 15 min. D) 12 hours E) 12 hrs. 25 min.
- (47) Four ping pong balls numbered 1, 2, 3, and 4 are placed in a bag and two are drawn at random without replacement. What is the probability that their sum is an odd number?
 A) $\frac{1}{3}$ B) $\frac{1}{2}$ C) $\frac{2}{3}$ D) $\frac{7}{10}$ E) $\frac{4}{5}$
- (48) If $x - y = 18$ and $x^2 - y^2 = 396$, then $xy =$
 A) 2 B) 20 C) 21 D) 22 E) 40
- (49) A box contains 14 disks, each colored red, blue or green. There are twice as many red disks as green disks, and half as many blue as green. How many disks are green?
 A) 2 B) 4 C) 6 D) 8 E) 10
- (50) Two identical squares, each with side length 5-cm, overlap as shown to the right. The shape of their overlap is a square, which has an area of 4-cm^2 . What is the perimeter, in centimeters, of the shaded figure?
 A) 24 cm B) 32 cm C) 40 cm D) 42 cm E) 50 cm



2022 – 2023 University Interscholastic League JH/MS Mathematics Contest B – Key

- (1) E
- (2) C
- (3) D
- (4) D
- (5) C
- (6) A
- (7) B
- (8) A
- (9) E
- (10) A
- (11) C
- (12) B
- (13) C
- (14) A
- (15) A
- (16) C
- (17) E
- (18) D
- (19) A
- (20) E (9800)
- (21) C
- (22) B
- (23) A
- (24) E
- (25) E (120)

- (26) C
- (27) E
- (28) B
- (29) E
- (30) E
- (31) D
- (32) C
- (33) A
- (34) B
- (35) E
- (36) C
- (37) D
- (38) D
- (39) B
- (40) C
- (41) A
- (42) A
- (43) D
- (44) C
- (45) A
- (46) A
- (47) C
- (48) E
- (49) B
- (50) B

SPRING DISTRICT 2022-2023

A+ ACADEMICS



University Interscholastic League

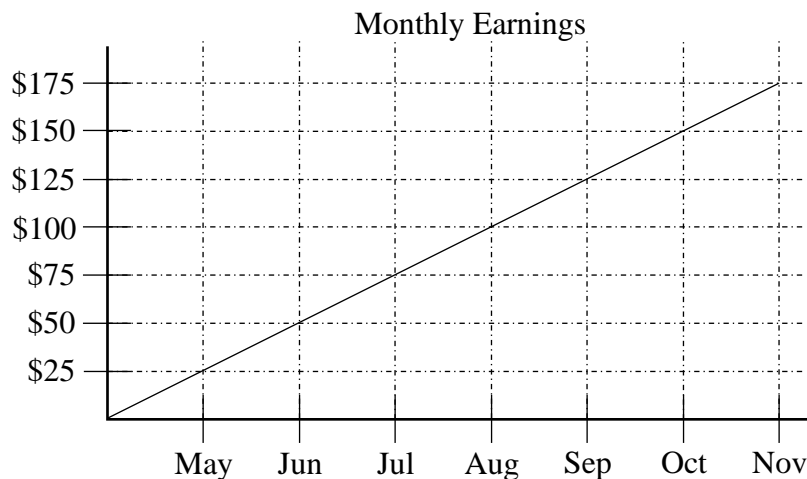


Mathematics

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2022 – 2023 University Interscholastic League JH/MS Mathematics Contest C

- (1) Evaluate: $12^{-1} \times (0.5)^{-1} \times 60$.
A) 24 B) $1\frac{1}{2}$ C) 5 D) $2\frac{1}{2}$ E) None of these
- (2) $\frac{2}{3} \times \frac{3}{4} \times \frac{4}{5} \times \frac{5}{6} =$
A) $\frac{1}{6}$ B) $\frac{1}{3}$ C) $\frac{2}{5}$ D) $\frac{1}{4}$ E) 1
- (3) $4.4\% =$ _____ (common fraction)
A) $\frac{11}{250}$ B) $\frac{44}{25}$ C) $\frac{1}{44}$ D) $\frac{1}{440}$ E) $\frac{1}{40}$
- (4) Which of the statements below is an example of the distributive property?
A) $X + Y = Y + X$
B) $2(X + Y) = 2X + 2Y$
C) $X^{-1} = \frac{1}{X}$
D) $X + (Y + Z) = (X + Y) + Z$
E) $X \times \frac{1}{X} = 1$
- (5) Each month Wesley saved the money he earned for doing different jobs in his piggy bank every time he got paid. Based on the graph below, how much should he earn total for May, June, and July?



- A) \$150 B) \$125 C) \$225 D) \$250 E) \$275
- (6) What is 6050.287 rounded to the nearest tenth?
A) 6,050 B) 6,100 C) 6,050.29 D) 6,050.3 E) 6,051
- (7) What is 80% of 250?
A) 50 B) 100 C) 150 D) 200 E) 1,000
- (8) $6\frac{1}{4} \times 40 =$
A) 240 B) 10 C) 280 D) 28 E) 250

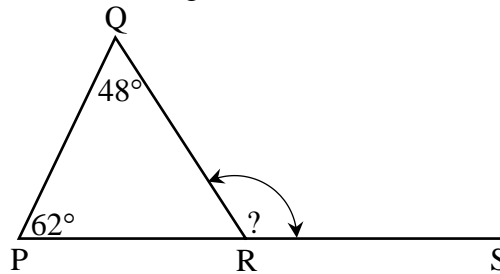
- (9) Javier buys 5 pounds of apples at 60¢ per pound and uses a 20% off coupon when he purchases the apples. What is the total amount he paid for the apples?
 A) \$3.00 B) \$3.60 C) \$2.60 D) \$2.40 E) \$4.00
- (10) $\frac{3}{2} \times \frac{4}{3} \times \frac{5}{4} \times \frac{6}{5} \dots \times \frac{1980}{1979} = ?$
 A) 3,960 B) 989.5 C) 495 D) 1,981 E) 990
- (11) What value for w makes this equation true?

$$\mathbf{8 \times w = (8 \times 20) - (8 \times 4)}$$

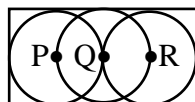
 A) 24 B) 16 C) 22 D) 20 E) 128
- (12) $\frac{2}{10} + \frac{4}{10} + \frac{6}{10} + \frac{8}{10} + \dots + \frac{14}{10} = ?$
 A) $4\frac{3}{5}$ B) $4\frac{2}{5}$ C) $3\frac{3}{5}$ D) $5\frac{3}{5}$ E) $3\frac{9}{10}$
- (13) $4^{10} \div 11$ has a remainder of
 A) 1 B) 2 C) 3 D) 4 E) 5
- (14) $18\frac{2}{3}\%$ of 15 is equal to 56% of what?
 A) 75 B) 60 C) 45 D) 25 E) 5
- (15) What is the sum of the unique prime factors of 70?
 A) 7 B) 14 C) 12 D) 21 E) 15
- (16) A whole number squared times itself is 343. What is the number?
 A) 3 B) 5 C) 6 D) 7 E) 49
- (17) What is the median of 12, 24, 36, and 28?
 A) 25 B) 26 C) $25\frac{1}{4}$ D) $25\frac{3}{4}$ E) 27
- (18) What is the smallest prime number greater than 70?
 A) 73 B) 77 C) 78 D) 79 E) None of these
- (19) If $x = 17$, then $x^2 + 26x + 169 =$
 A) 30 B) 90 C) 900 D) 1,032 E) 1,690
- (20) $13^2 + 26^2 =$
 A) 845 B) 676 C) 689 D) 1,352 E) 1,521
- (21) 59 (base 10) = _____ (base 3).
 A) 192 B) 2012 C) 212 D) 19 remainder 2 E) 2102
- (22) What is the smallest number that the three numbers: 18, 12 and 24, can divide evenly into?
 A) 2 B) 4 C) 6 D) 48 E) 72

- (23) What is the slope of the straight line $\frac{3}{4}x - 6y = 12$?
 A) -8 B) $\frac{3}{4}$ C) $-\frac{1}{8}$ D) $\frac{1}{8}$ E) $\frac{-3}{4}$
- (24) Paige has 8 classical CDs, 7 jazz CDs, and 5 rock CDs. If she randomly selects one CD from her collection to play, what is the probability that it is a rock CD?
 A) 0.05 B) 0.50 C) 0.25 D) 0.20 E) 0.16
- (25) In how many ways can you arrange 6 books on a shelf?
 A) 720 B) 360 C) 250 D) 36 E) 30
- (26) What is the remainder when 1234567 is divided by 11?
 A) 1 B) 2 C) 3 D) 4 E) 6
- (27) Genny's candy jar contains 6 peppermint candies, 3 spearmint candies, and 3 wintergreen candies. The first candy she randomly picks from the jar is peppermint. If it is not replaced, what is the probability the second candy she randomly picks from the jar will also be peppermint?
 A) $\frac{1}{3}$ B) $\frac{5}{11}$ C) $\frac{1}{2}$ D) $\frac{5}{12}$ E) $\frac{1}{6}$

- (28) Based on the angles given in the drawing below, what is the measure of $\angle QRS$?



- A) 110° B) 128° C) 112° D) 62° E) 42°
- (29) What is the least common Multiple (LCM) for the two terms below?
 $16x^2y^3$ and $12x^3y^2$
 A) $2x^2y^2$ B) $4xy$ C) $4x^2y^2$ D) $48x^3y^3$ E) $24x^3y^3$
- (30) Find the smallest positive integral value for k such that $772k5$ is divisible by 3.
 A) 0 B) 1 C) 3 D) 6 E) 9
- (31) What is the unit's digit for 12^8 ?
 A) 1 B) 2 C) 4 D) 5 E) 6
- (32) Three congruent circles with centers P, Q and R are tangent to the sides of rectangle as shown below. The circle centered at Q has diameter 6 and passes through points P and R. What is the area of the rectangle?

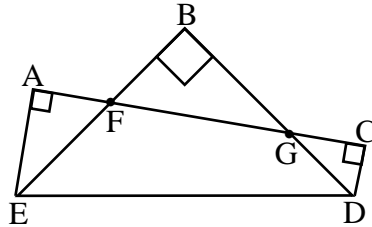


- A) 12 B) 24 C) 36 D) 64 E) 72

- (33) If $2x + y = 11$ and $3x - y = 14$, then $xy =$
 A) -5 B) -6 C) 5 D) 6 E) None of these

- (34) $(1.5)^2 \div (4.5)^2 \times (1.8)^2 =$
 A) 2.4 B) 3.6 C) 0.02 D) 0.36 E) 0.04

- (35) In the figure below $\angle A$, $\angle B$, and $\angle C$ are each right angles. If $\angle AEB$ is 35° and $\angle BED = \angle BDE$, then what is $\angle CDE$ equal?



- A) 75° B) 100° C) 30° D) 80° E) 120°

- (36) $1.1333\dots =$ _____ (common fraction)
 A) $\frac{2}{15}$ B) $\frac{17}{15}$ C) $\frac{7}{15}$ D) $\frac{13}{9}$ E) $\frac{13}{15}$

- (37) 44 (base 5) + 55 (base 6) + 66 (base 7) = _____ (base 10).
 A) 107 B) 165 C) 156 D) 83 E) 104

- (38) What is the sum of the ninth and tenth triangular numbers?
 A) 100 B) 90 C) 81 D) 19 E) None of these

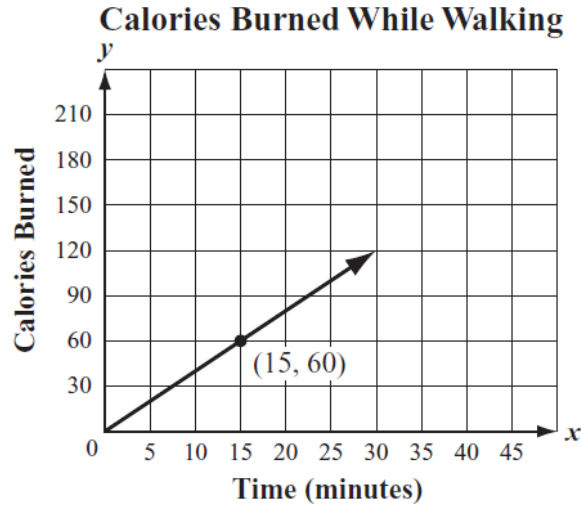
- (39) What is the 100th digit to the right of the decimal point in the decimal form of $\frac{11}{37}$?
 A) 0 B) 1 C) 2 D) 7 E) 9

- (40) Students from three middle schools worked on a summer project.
 Seven students from Obama Middle School worked for 3 days.
 Four students from Lincoln Middle School worked for 5 days.
 Five students from Richards Middle School worked for 9 days.
 The total amount paid for the students' work was \$774. Assuming each student received the same amount for a day's work, how much did the students from Richards Middle School earn altogether?
 A) \$45.00 B) \$405.00 C) \$180.00 C) \$81.00 E) \$181.00

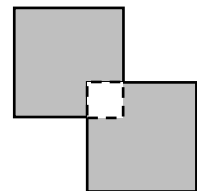
- (41) Suppose a new operation, \heartsuit , is defined so that $a \heartsuit b = a^2 - b^2$. What is $(2 \heartsuit 3) \heartsuit 4$ equal?
 A) -9 B) 9 C) 4 D) 25 E) 32

- (42) Which of the following statements is false?
 A) Every number that is odd has a factor of 1.
 B) Every prime number has exactly two factors.
 C) Every perfect square has an even number of factors.
 D) Every number that has 8 as a factor also has 4 as a factor.
 E) Every composite number can be written as the product of prime numbers.

The graph below shows the number of Calories Matthew will burn over time while walking at a constant rate. Please use this information plus the graph to answer questions 43 – 46.



- (43) At what rate, in calories per minute (Cal/min), is Matthew burning?
 A) $\frac{1}{4}$ Cal/min B) 75 Cal/min C) 4 Cal/min D) 40 Cal/min E) 0.4 Cal/min
- (44) What is the number of Calories Matthew will burn after walking at a constant rate for 42 minutes?
 A) 168 Calories B) 210 Calories C) 132 Calories D) 162 Calories E) 630 Calories
- (45) At his Calorie burning rate, how long does it take Matthew to burn a single Calorie?
 A) 2.5 seconds B) 4 seconds C) 6.6 seconds D) 15 seconds E) 25 seconds
- (46) Mike, Matthew’s older brother, decides to exercise by walking as well. If he can walk at a rate that burns 25% more Calories per minute than Matthew, how long should it take him to burn 100 Calories?
 A) 4 minutes B) 5 minutes C) 6 minutes D) 20 minutes E) 25 minutes
- (47) Four ping pong balls numbered 1, 2, 3, and 4 are placed in a bag and two are drawn at random without replacement. What is the probability that their sum is an even number?
 A) $\frac{7}{10}$ B) $\frac{1}{2}$ C) $\frac{2}{3}$ D) $\frac{1}{3}$ E) $\frac{4}{5}$
- (48) If $x - y = 18$ and $x^2 - y^2 = 216$, then $xy =$
 A) 15 B) 45 C) 30 D) -30 E) -45
- (49) A box contains 21 disks, each colored red, blue or green. There are twice as many red disks as green disks, and half as many blue as green. How many disks are green?
 A) 2 B) 4 C) 6 D) 8 E) 10
- (50) Two identical squares, each with side length 8-cm, overlap as shown to the right. The shape of their overlap is a square, which has an area of 9-cm^2 . What is the perimeter, in centimeters, of the shaded figure?
 A) 20 cm D) 52 cm
 B) 32 cm E) 55 cm
 C) 42 cm



2022 – 2023 University Interscholastic League JH/MS Mathematics Contest C – Key

- (1) E (10)
- (2) B
- (3) A
- (4) B
- (5) A
- (6) D
- (7) D
- (8) E
- (9) D
- (10) E
- (11) B
- (12) D
- (13) A
- (14) E
- (15) B
- (16) D
- (17) B
- (18) E (71)
- (19) C
- (20) A
- (21) B
- (22) E
- (23) D
- (24) C
- (25) A

- (26) D
- (27) B
- (28) A
- (29) D
- (30) A
- (31) E
- (32) E
- (33) C
- (34) D
- (35) B
- (36) B
- (37) A
- (38) A
- (39) C
- (40) B
- (41) B
- (42) C
- (43) C
- (44) A
- (45) D
- (46) D
- (47) D
- (48) E
- (49) C
- (50) D

**University Interscholastic League
2022 – 2023 Junior High Number Sense Test A**

Contestant's Number _____

Final		
2 nd		
1 st		
Score	Initials	

**Read Directions Carefully
Before Beginning Test**

**Do Not Unfold This Sheet
Until Told to Begin**

Directions: Do not turn this page until the person conducting this test gives the signal to begin. This is a ten-minute test. There are 80 problems. Solve accurately and quickly as many as you can in the order in which they appear. **ALL PROBLEMS ARE TO BE SOLVED MENTALLY.** Make no calculations with paper and pencil. Write only the answer in the space provided at the end of each problem. Problems marked with a (*) require approximate integral answers; any answer to a starred problem that is within five percent of the exact answer will be scored correct; all other problems require exact answers.

The person conducting this contest should explain these directions to the contestants.

Stop – Wait for Signal!

- | | |
|--|--|
| <p>(1) $23 + 51 =$ _____</p> <p>(2) $18 \times 5 =$ _____</p> <p>(3) $79 - 26 =$ _____</p> <p>(4) $1203 \div 3 =$ _____</p> <p>(5) $\frac{3}{8} + \frac{1}{4} =$ _____</p> <p>(6) $24 \div 0.5 =$ _____</p> <p>(7) $40 \times 0.25 =$ _____</p> <p>(8) $24^2 =$ _____</p> <p>(9) $11 \times 5 \times 2 =$ _____</p> <p>*(10) $21 + 2022 + 23 + 2023 =$ _____</p> <p>(11) $1.75 \times 8 =$ _____</p> <p>(12) The mode of 2, 6, 8, 2, 6 and 2 is _____</p> <p>(13) Which is larger: $\frac{6}{11}$ or 0.55? _____</p> <p>(14) $15 \times 35 =$ _____</p> <p>(15) $38 \times 78 =$ _____</p> <p>(16) $97 - 12 - 18 =$ _____</p> <p>(17) $43^2 =$ _____</p> <p>(18) $9 + 14 + 19 + 24 + 29 =$ _____</p> <p>(19) MCMLI = _____ (Arabic Numeral)</p> | <p>*(20) $111.111\% \times 899 =$ _____</p> <p>(21) $0.75 \times 16 - 0.5 \times 16 =$ _____</p> <p>(22) $111 \times 135 =$ _____</p> <p>(23) If $f(x) = 10 - 3x^2$, then $f(-2) =$ _____</p> <p>(24) $8\frac{1}{3} \times 8\frac{2}{3} =$ _____ (mixed number)</p> <p>(25) $7\frac{3}{4} - 4\frac{5}{6} =$ _____</p> <p>(26) $29^2 + 29 =$ _____</p> <p>(27) The cube root of -125 is _____</p> <p>(28) If n is to 20 as 12 is to 4, then $n =$ _____</p> <p>(29) If $12 - 4x$ is 4 then $x =$ _____</p> <p>*(30) $2023 + 2022 \times 4 =$ _____</p> <p>(31) $93 \times 92 =$ _____</p> <p>(32) The product of the two largest prime numbers less than 20 is _____</p> <p>(33) If $0.025 + 0.075 = n$, the $n^{-1} =$ _____</p> <p>(34) 18 is divisible by how many whole numbers? _____</p> <p>(35) 1 square mile = _____ acres</p> <p>(36) 4 percent = _____ (common fraction)</p> <p>(37) The total cost of item, that costs \$10, with a sales tax of $8\frac{1}{2}\%$ is \$ _____</p> |
|--|--|

- (38) $231 \times 101 =$ _____
- (39) The area of an equilateral triangle with an altitude of 6-cm is $a\sqrt{3}$ and $a =$ _____ cm²
- *(40) $125\sqrt{14400} =$ _____
- (41) 63 (base 8) = _____ (base 2)
- (42) $5^3 + 3^3 =$ _____
- (43) The GCF of 6, 12 and 18 is _____
- (44) What is the area of a trapezoid with base 17, 16 and height 20? _____
- (45) 23 (base 5) $\times 2$ (base 5) = _____ (base 5)
- (46) If $24 \div 3 = n \div 2$, then $n =$ _____
- (47) What is the length of an edge of a cube with surface area 864? _____
- (48) $1.5 \text{ m}^2 =$ _____ cm²
- (49) If $24 - 3x < 18$, then $2x >$ _____
- *(50) $55^3 =$ _____
- (51) In the sequence: 1, 4, a , 16, 25, b , 49, . . .
 $2a - b =$ _____
- (52) What is the 6th term in the sequence 2, 4, 6, . . .? _____
- (53) What is the sum of the interior angles for a convex polygon with 5 sides? _____^o
- (54) What is the product of the LCM and GCD of 18 and 20? _____
- (55) What is the length of the side of a rectangle with perimeter 44 and width 8? _____
- (56) What is the diameter of a circle with an area of 576π ? _____
- (57) If set $\mathbf{A} = \{1, 2, 3, \dots, 19\}$ and set $\mathbf{B} = \{3, 6, 9, \dots, 21\}$, then the number of elements in $\mathbf{A} \cap \mathbf{B}$ is _____
- (58) $(13^2 + 7 \times 6) \div 5$ has a remainder of _____
- (59) The number of faces for a cube is _____
- *(60) $749^2 \times 101 \div 251 =$ _____
- (61) $(2^{-1} + 2^{-2})^{-1} =$ _____
- (62) 440 yards = _____ mile
- (63) 60 feet/sec = _____ yards/min
- (64) 18% of 18 = _____
- (65) $5^7 \div 7$ has a remainder of _____
- (66) If the volume of a right circular cylinder, with radius 4 and length 12 is $k\pi$, what is k ? _____
- (67) The sum of the positive divisors of 12 is _____
- (68) $6! =$ _____
- (69) $6\frac{3}{4} \div \frac{1}{8} =$ _____
- *(70) $350\pi^3 =$ _____
- (71) $21^2 + 3^2 =$ _____
- (72) $62\frac{1}{2}\%$ = _____ (common fraction)
- (73) $0.4666\dots =$ _____ (common fraction)
- (74) The volume of a right circular cone with height 9 and radius 4 is $k\pi$, and $k =$ _____
- (75) The sum of the 4th and 5th triangular numbers is _____
- (76) $18^2 \times 25 =$ _____
- (77) If the shortest distance between the points (0, 3) and (\mathbf{x} , 0) is 5, what is \mathbf{x} ? _____
- (78) $\frac{5!}{3!} - 15 =$ _____
- (79) $\left(18\frac{1}{2}\right)^2 - \left(6\frac{1}{2}\right)^2 =$ _____
- *(80) 25 miles = _____ yards

2022 – 2023 University Interscholastic League Junior High Number Sense Test A – Key

(1) 74	*(20) 949 – 1048	(38) 23331	(59) 6
(2) 90	(21) 4	(39) 12	*(60) 214455 – 237028
(3) 53	(22) 14985	*(40) 14250 – 15750	(61) $1\frac{1}{3}; \frac{4}{3}$
(4) 401	(23) -2	(41) 110011	(62) $\frac{1}{4}; .25$
(5) $\frac{5}{8}; .625$	(24) $72\frac{2}{9}$	(42) 152	(63) 1200
(6) 48	(25) $2\frac{11}{12}; \frac{35}{12}$	(43) 6	(64) $3.24; 3\frac{6}{25}; \frac{81}{25}$
(7) 10	(26) 870	(44) 330	(65) 5
(8) 576	(27) -5	(45) 101	(66) 192
(9) 110	(28) 60	(46) 16	(67) 28
*(10) 3885 – 4293	(29) 2	(47) 12	(68) 720
(11) 14	(30) 9606 – 10616	(48) 15000	(69) 54
(12) 2	(31) 8556	(49) 4	*(70) 10310 – 11394
(13) $.55; \frac{11}{20}$	(32) 323	*(50) 158057 – 174693	(71) 450
(14) 525	(33) 10	(51) -18	(72) $\frac{5}{8}$
(15) 2964	(34) 6	(52) 12	(73) $\frac{7}{15}$
(16) 67	(35) 640	(53) 540	(74) 48
(17) 1849	(36) $\frac{1}{25}$	(54) 360	(75) 25
(18) 95	(37) 10.85	(55) 14	(76) 8100
(19) 1951		(56) 48	(77) 4
		(57) 6	(78) 5
		(58) 1	(79) 300
			*(80) 41800 – 46200

Note: *(Number) x – y means an integer between x and y inclusive.

If an answer is of the type like $\frac{2}{3}$ it cannot be written as .666... or $\overline{.6}$.

University Interscholastic League
2022 – 2023 Junior High Number Sense Test B

Contestant's Number _____

Final		
2 nd		
1 st		
Score	Initials	

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- | | |
|--|--|
| <p>(1) $353 + 51 =$ _____</p> <p>(2) $17 \times 7 =$ _____</p> <p>(3) $84 - 36 =$ _____</p> <p>(4) $120 \div 8 =$ _____</p> <p>(5) $\frac{7}{16} + \frac{1}{4} =$ _____</p> <p>(6) $32 \div 0.8 =$ _____</p> <p>(7) $0.25 \times 44 =$ _____</p> <p>(8) $21^2 =$ _____</p> <p>(9) $8 \times 6 \times 5 =$ _____</p> <p>*(10) $1981 + 2202 + 18 + 2203 =$ _____</p> <p>(11) $1.5 \times 22 =$ _____</p> <p>(12) The mode of 1, 3, 5, 4, 1 and 2 is _____</p> <p>(13) Which is smaller: $\frac{7}{11}$ or 0.64? _____</p> <p>(14) $83 \times 87 =$ _____</p> <p>(15) $24 \times 12 =$ _____</p> <p>(16) $121 - 29 - 21 =$ _____</p> <p>(17) $72^2 =$ _____</p> <p>(18) $7 + 12 + 17 + 22 + 27 =$ _____</p> <p>(19) MMXXI = _____ (Arabic Numeral)</p> | <p>*(20) $222.222\% \times 269 =$ _____</p> <p>(21) $0.25 \times 12 + 0.5 \times 12 =$ _____</p> <p>(22) $423 \times 111 =$ _____</p> <p>(23) If $f(x) = 15 + 2x^2$, then $f(6) =$ _____</p> <p>(24) $4\frac{4}{5} \times 4\frac{1}{5} =$ _____ (mixed number)</p> <p>(25) $3\frac{5}{6} + 2\frac{2}{3} =$ _____</p> <p>(26) $89^2 + 89 =$ _____</p> <p>(27) The cube root of -216 is _____</p> <p>(28) If n is to 12 as 3 is to 4, then $n =$ _____</p> <p>(29) If $16 + 4x$ is 24 then $x =$ _____</p> <p>*(30) $2022 \times 5 - 2023 =$ _____</p> <p>(31) $105 \times 102 =$ _____</p> <p>(32) The sum of the two largest prime numbers less than 60 is _____</p> <p>(33) If $0.75 + 0.5 = n$, the $n^{-1} =$ _____</p> <p>(34) 24 is divisible by how many whole numbers? _____</p> <p>(35) Three-fourths of a square mile = _____ acres</p> <p>(36) 8 percent = _____ (common fraction)</p> <p>(37) The total cost of item, that costs \$100, with a sales tax of $8\frac{1}{2}\%$ is \$ _____</p> |
|--|--|

- (38) $101 \times 483 =$ _____
- (39) The area of an equilateral triangle with an altitude of 9-cm is $a\sqrt{3}$ and $a =$ _____ cm²
- *(40) $250\sqrt{16900} =$ _____
- (41) 46 (base 8) = _____ (base 2)
- (42) $4^3 - 3^2 =$ _____
- (43) The GCF of 8, 24 and 18 is _____
- (44) What is the area of a trapezoid with base 14, 16 and height 15? _____
- (45) 13 (base 4) $\times 2$ (base 4) = _____ (base 4)
- (46) If $15 \div 3 = n \div 6$, then $n =$ _____
- (47) What is the length of an edge of a cube with surface area 150? _____
- (48) $0.25 \text{ m}^2 =$ _____ cm²
- (49) If $15 - 4x < 43$, then $2x >$ _____
- *(50) $25^3 =$ _____
- (51) In the sequence: 1, 3, a , 7, 9, b , 13, . . .
 $a + b^2 =$ _____
- (52) What is the 5th term in the sequence 1, 4, 9, . . .? _____
- (53) What is the sum of the interior angles for a convex polygon with 6 sides? _____^o
- (54) What is the product of the LCM and GCD of 16 and 24? _____
- (55) What is the length of the side of a rectangle with perimeter 32 and width 5? _____
- (56) What is the radius of a circle with a circumference of 36π ? _____
- (57) If set $\mathbf{A} = \{1, 2, 3, \dots, 19\}$ and set $\mathbf{B} = \{2, 4, 6, \dots, 20\}$, then the number of elements in $\mathbf{A} \cap \mathbf{B}$ is _____
- (58) $(14^2 + 8 \times 9) \div 6$ has a remainder of _____
- (59) The number of edges for a square pyramid is _____
- *(60) $72^2 \times 101 \div 36 =$ _____
- (61) $(2^{-3} + 2^{-1})^{-1} =$ _____
- (62) 880 yards = _____ mile
- (63) 30 feet/min = _____ yards/sec
- (64) 16% of 16 = _____
- (65) $11^7 \div 7$ has a remainder of _____
- (66) If the volume of a right circular cylinder, with radius 5 and length 10 is $k\pi$, what is k ? _____
- (67) The sum of the positive divisors of 17 is _____
- (68) $4! =$ _____
- (69) $6\frac{3}{4} \div \frac{3}{8} =$ _____
- *(70) $4000\pi^2 =$ _____
- (71) $42^2 + 6^2 =$ _____
- (72) $27\frac{3}{11}\% =$ _____ (common fraction)
- (73) $0.1333\dots =$ _____ (common fraction)
- (74) The volume of a right circular cone with height 3 and radius 6 is $k\pi$, and $k =$ _____
- (75) The sum of the 7th and 6th triangular numbers is _____
- (76) $20^2 \times 25 =$ _____
- (77) If the shortest distance between the points (0, 6) and (\mathbf{x} , 0) is 10, what is \mathbf{x} ? _____
- (78) $\frac{4!}{2!} + 12 =$ _____
- (79) $\left(9\frac{1}{2}\right)^2 - \left(5\frac{1}{2}\right)^2 =$ _____
- *(80) 11 miles = _____ yards

2022 – 2023 University Interscholastic League Junior High Number Sense Test B – Key

(1) 404	*(20) 568 – 627	(38) 48783	(59) 8
(2) 119	(21) 9	(39) 27	*(60) 13817 – 15271
(3) 48	(22) 46953	*(40) 30875– 34125	(61) $\frac{8}{5}$; 1.6; $1\frac{3}{5}$
(4) 15	(23) 87	(41) 100110	(62) $\frac{1}{2}$; .5
(5) $\frac{11}{16}$; .6875	(24) $20\frac{4}{25}$	(42) 55	(63) $\frac{1}{6}$
(6) 40	(25) $6\frac{1}{2}$; 6.5; $\frac{13}{2}$	(43) 2	(64) 2.56; $2\frac{14}{25}$; $\frac{64}{25}$
(7) 11	(26) 8010	(44) 225	(65) 4
(8) 441	(27) -6	(45) 32	(66) 250
(9) 240	(28) 9	(46) 30	(67) 18
*(10) 6084 – 6724	(29) 2	(47) 5	(68) 24
(11) 33	(30) 7683 – 8491	(48) 2500	(69) 18
(12) 1	(31) 10710	(49) -14	*(70) 37505 – 41452
(13) $\frac{7}{11}$	(32) 112	*(50) 14844 – 16406	(71) 1800
(14) 7221	(33) $\frac{4}{5}$; .8	(51) 126	(72) $\frac{3}{11}$
(15) 288	(34) 8	(52) 25	(73) $\frac{2}{15}$
(16) 71	(35) 480	(53) 720	(74) 36
(17) 5184	(36) $\frac{2}{25}$	(54) 384	(75) 49
(18) 85	(37) 108.50	(55) 11	(76) 10000
(19) 2021		(56) 18	(77) 8
		(57) 9	(78) 24
		(58) 4	(79) 60
			*(80) 18392 – 20328

Note: *(Number) x – y means an integer between x and y inclusive.

If an answer is of the type like $\frac{2}{3}$ it cannot be written as .666... or $\overline{.6}$.

University Interscholastic League
2022 – 2023 Junior High Number Sense Test C

Contestant's Number _____

Final		
2 nd		
1 st		
Score	Initials	

**Read Directions Carefully
Before Beginning Test**

**Do Not Unfold This Sheet
Until Told to Begin**

Directions: Do not turn this page until the person conducting this test gives the signal to begin. This is a ten-minute test. There are 80 problems. Solve accurately and quickly as many as you can in the order in which they appear. **ALL PROBLEMS ARE TO BE SOLVED MENTALLY.** Make no calculations with paper and pencil. Write only the answer in the space provided at the end of each problem. Problems marked with a (*) require approximate integral answers; any answer to a starred problem that is within five percent of the exact answer will be scored correct; all other problems require exact answers.

The person conducting this contest should explain these directions to the contestants.
Stop – Wait for Signal!

- | | |
|--|---|
| <p>(1) $39 + 282 =$ _____</p> <p>(2) $17 \times 6 =$ _____</p> <p>(3) $63 - 36 =$ _____</p> <p>(4) $105 \div 7 =$ _____</p> <p>(5) $\frac{9}{16} + \frac{3}{8} =$ _____</p> <p>(6) $48 \div 0.8 =$ _____</p> <p>(7) $28 \times 0.25 =$ _____</p> <p>(8) $14^2 =$ _____</p> <p>(9) $11 \times 5 \times 4 =$ _____</p> <p>*(10) $1976 + 1951 + 12 + 2023 =$ _____</p> <p>(11) $32 \times 1.5 =$ _____</p> <p>(12) The mode of 2, 3, 5, 2, 5 and 2 is _____</p> <p>(13) Which is larger: $\frac{8}{11}$ or 0.73? _____</p> <p>(14) $43 \times 47 =$ _____</p> <p>(15) $28 \times 12 =$ _____</p> <p>(16) $130 - 41 - 29 =$ _____</p> <p>(17) $83^2 =$ _____</p> <p>(18) $10 + 13 + 16 + 19 + 22 =$ _____</p> <p>(19) MMXXIV = _____ (Arabic Numeral)</p> | <p>*(20) $222.222\% \times 1809 =$ _____</p> <p>(21) $0.85 \times 18 - 0.35 \times 18 =$ _____</p> <p>(22) $761 \times 111 =$ _____</p> <p>(23) If $f(x) = 16 + 2x^2$, then $f(4) =$ _____</p> <p>(24) $8\frac{3}{4} \times 8\frac{1}{4} =$ _____ (mixed number)</p> <p>(25) $9\frac{7}{8} + 5\frac{3}{4} =$ _____</p> <p>(26) $39^2 + 39 =$ _____</p> <p>(27) The cube root of -27 is _____</p> <p>(28) If n is to 4 as 9 is to 12, then $n =$ _____</p> <p>(29) If $15 + 9x$ is 24 then $x =$ _____</p> <p>*(30) $2023 \times 5 + 2022 =$ _____</p> <p>(31) $106 \times 105 =$ _____</p> <p>(32) The sum of the two smallest prime numbers greater than 40 is _____</p> <p>(33) If $0.25 + 0.25 = n$, the $n^{-1} =$ _____</p> <p>(34) 47 is divisible by how many whole numbers? _____</p> <p>(35) One-eighth of a square mile = _____ acres</p> <p>(36) 6 percent = _____ (common fraction)</p> <p>(37) The total cost of item, that costs \$1, with a sales tax of $8\frac{1}{2}\%$ is \$ _____</p> |
|--|---|

- (38) $101 \times 738 =$ _____
- (39) The area of an equilateral triangle with an altitude of 3-cm is $a\sqrt{3}$ and $a =$ _____ cm^2
- *(40) $250\sqrt{57600} =$ _____
- (41) 72 (base 8) = _____ (base 2)
- (42) $3^3 - 2^4 =$ _____
- (43) The GCF of 18, 24 and 12 is _____
- (44) What is the area of a trapezoid with base 15, 17 and height 12? _____
- (45) 33 (base 4) \times 3 (base 4) = _____ (base 4)
- (46) If $24 \div 3 = \mathbf{n} \div 8$, then $\mathbf{n} =$ _____
- (47) What is the length of an edge of a cube with surface area 24? _____
- (48) $3.5 \text{ m}^2 =$ _____ cm^2
- (49) If $15 - 5x < 55$, then $2x >$ _____
- *(50) $32^3 =$ _____
- (51) In the sequence: 1, 3, \mathbf{a} , 7, 9, \mathbf{b} , 13, . . .
 $2\mathbf{a} + \mathbf{b}^2 =$ _____
- (52) What is the 5th term in the sequence 32, 8, 2, . . .? _____
- (53) What is the sum of the interior angles for a convex polygon with 3 sides? _____ $^\circ$
- (54) What is the product of the LCM and GCD of 22 and 16? _____
- (55) What is the length of the side of a rectangle with perimeter 24 and width 5? _____
- (56) What is the radius of a circle with a circumference of 64π ? _____
- (57) If set $\mathbf{A} = \{1, 2, 3, \dots, 19\}$ and set $\mathbf{B} = \{5, 10, 15, \dots, 20\}$, then the number of elements in $\mathbf{A} \cap \mathbf{B}$ is _____
- (58) $(24^2 + 5 \times 9) \div 6$ has a remainder of _____
- (59) The number of vertices for a square pyramid is _____
- *(60) $96^2 \times 101 \div 16 =$ _____
- (61) $(2^{-3} + 2^{-2})^{-1} =$ _____
- (62) 660 yards = _____ mile
- (63) 36 feet/min = _____ yards/sec
- (64) 12% of 20 = _____
- (65) $10^7 \div 7$ has a remainder of _____
- (66) If the volume of a right circular cylinder, with radius 4 and length 12 is $k\pi$, what is k ? _____
- (67) The sum of the positive divisors of 41 is _____
- (68) $1! - 0! =$ _____
- (69) $9\frac{3}{4} \div \frac{3}{8} =$ _____
- *(70) $3000\pi^2 =$ _____
- (71) $28^2 + 4^2 =$ _____
- (72) $18\frac{2}{11}\% =$ _____ (common fraction)
- (73) $0.2666\dots =$ _____ (common fraction)
- (74) The volume of a right circular cone with height 9 and radius 6 is $k\pi$, and $k =$ _____
- (75) The sum of the 8th and 7th triangular numbers is _____
- (76) $16^2 \times 25 =$ _____
- (77) If the shortest distance between the points (0, 12) and (\mathbf{x} , 0) is 13, what is \mathbf{x} , if $\mathbf{x} > 0$? _____
- (78) $\frac{6!}{3!} - 100 =$ _____
- (79) $\left(18\frac{1}{2}\right)^2 - \left(1\frac{1}{2}\right)^2 =$ _____
- *(80) 12 miles = _____ yards

2022 – 2023 University Interscholastic League Junior High Number Sense Test C – Key

(1) 321	*(20) 3819 – 4220	(38) 74538	(59) 5
(2) 102	(21) 9	(39) 3	*(60) 55268 – 61084
(3) 27	(22) 84471	*(40) 57000– 63000	(61) $\frac{8}{3}; 2\frac{2}{3}$
(4) 15	(23) 48	(41) 111010	(62) $\frac{3}{8}; .375$
(5) $\frac{15}{16}; .9375$	(24) $72\frac{3}{16}$	(42) 11	(63) $\frac{1}{5}; .2$
(6) 60	(25) $15\frac{5}{8}; \frac{125}{8}; 15.625$	(43) 6	(64) $2.4; 2\frac{2}{5}; \frac{12}{5}$
(7) 7	(26) 1560	(44) 192	(65) 3
(8) 196	(27) -3	(45) 231	(66) 192
(9) 220	(28) 3	(46) 64	(67) 42
*(10) 5664 – 6260	(29) 1	(47) 2	(68) 0
(11) 48	(30) 11531 – 12743	(48) 35000	(69) 26
(12) 2	(31) 11130	(49) -16	*(70) 28129 – 31089
(13) .73	(32) 84	*(50) 31130 – 34406	(71) 800
(14) 2021	(33) 2	(51) 131	(72) $\frac{2}{11}$
(15) 336	(34) 2	(52) $\frac{1}{8}; .125$	(73) $\frac{4}{15}$
(16) 60	(35) 80	(53) 180	(74) 108
(17) 6889	(36) $\frac{3}{50}$	(54) 352	(75) 64
(18) 80	(37) 1.09	(55) 7	(76) 6400
(19) 2024		(56) 32	(77) 5
		(57) 3	(78) 20
		(58) 3	(79) 340
			*(80) 20064 – 22176

Note: *(Number) x – y means an integer between x and y inclusive.

If an answer is of the type like $\frac{2}{3}$ it cannot be written as .666... or $\overline{.6}$.

Contestant Number _____

Contestant Name _____
 (to be filled in after judging)

UIL A+ Ready Writing Evaluation Sheet: Elementary, Middle School, and Junior High

Evaluation criteria are listed in the order of importance. Write the number that indicates the quality in each of the sub-areas and tally the points.

(50%) _____/100

INTEREST: Writing exhibits originality of thought, analytical acuteness and overall coherence of exposition.

	<u>POOR</u>	<u>FAIR</u>	<u>GOOD</u>	<u>EXCELLENT</u>
Perceptive ideas	_____/7	_____/13	_____/19	_____/25
Originality	_____/7	_____/13	_____/19	_____/25
Examples	_____/7	_____/13	_____/19	_____/25
Title	_____/7	_____/13	_____/19	_____/25

(35%) _____/70

ORGANIZATION: Each paragraph develops a clear idea or ideas and contributes to an understanding of the prompt.

	<u>POOR</u>	<u>FAIR</u>	<u>GOOD</u>	<u>EXCELLENT</u>
Student answers prompt consistently <i>(either through supporting details, thesis, and/or plot points and character development)</i>	_____/3	_____/7	_____/11	_____/14
Well-developed paragraphs, focused on an idea or ideas	_____/3	_____/7	_____/11	_____/14
Transition	_____/3	_____/7	_____/11	_____/14
Support for student's response to prompt	_____/3	_____/7	_____/11	_____/14
Composition clarity (as a whole)	_____/3	_____/7	_____/11	_____/14

(15%) _____/30

CORRECTNESS OF STYLE: Writing avoids errors in sentence structure, punctuation, grammar, word usage and spelling that hinder clear communication.

	<u>POOR</u>	<u>FAIR</u>	<u>GOOD</u>	<u>EXCELLENT</u>
Punctuation	_____/1	_____/3	_____/5	_____/6
Sentence structure	_____/1	_____/3	_____/5	_____/6
Grammar	_____/1	_____/3	_____/5	_____/6
Word Usage	_____/1	_____/3	_____/5	_____/6
Spelling	_____/1	_____/3	_____/5	_____/6

TOTAL SCORE: _____/200

CONSTRUCTIVE COMMENTS FOR THE CONTESTANT:

Please read "Instructions for the Judges" for Ready Writing before evaluating contestants' papers. While judges are to consider all three elements in selecting the most effective compositions, they should weigh interest more than organization, and organization more than correctness of style.

AREAS NEEDING IMPROVEMENT:

Judge's signature _____



2022-23 A+ Ready Writing

INVITATIONAL

INSTRUCTIONS

Choose **one** of the following topics. Write the topic you have chosen at the top of your paper. **You should also include an original, creative title for your paper.** Remember you should not use your real name or that of your school.

SEVENTH AND EIGHTH GRADES

Topic: *Community Strength*

Helen Keller once said, "Alone we can do so little; together we can do so much." Write about a time when your community worked together and accomplished something.

Topic: *My Values*

Personal values are characteristics that are important to you. For instance, you might value honesty or integrity (or various other values). Write an essay explaining some of your personal values and why they are important to you.



2022-23 A+ Ready Writing

INVITATIONAL

INSTRUCTIONS

Choose **one** of the following topics. Write the topic you have chosen at the top of your paper. **You should also include an original, creative title for your paper.** Remember you should not use your real name or that of your school.

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2022-23 A+ Ready Writing

SPRING DISTRICT

INSTRUCTIONS

Choose **one** of the following topics. Write the topic you have chosen at the top of your paper. **You should also include an original, creative title for your paper.** Remember you should not use your real name or that of your school.

SEVENTH AND EIGHTH GRADES

Topic: *Painting Reality*

The artist Frida Kahlo once said, "I don't paint dreams or nightmares, I paint my own reality." What do you think this quote means and how can you apply it to your own life?

Topic: *Three Elements*

Write a creative story that includes these three elements: a telescope, footprints, and a hidden door. You may be as creative as you would like.

CONTESTANT NUMBER:

FOR GRADER USE ONLY

Score Test Below:

_____ Initials _____

_____ Initials _____

Papers contending to place:

_____ Initials _____



**University Interscholastic League
A+ Science Contest • Answer Sheet**

Write your contestant number in the upper right corner and circle your grade level below.

Circle Grade Level:

6th grade

7th grade

8th grade

1. _____

18. _____

35. _____

2. _____

19. _____

36. _____

3. _____

20. _____

37. _____

4. _____

21. _____

38. _____

5. _____

22. _____

39. _____

6. _____

23. _____

40. _____

7. _____

24. _____

41. _____

8. _____

25. _____

42. _____

9. _____

26. _____

43. _____

10. _____

27. _____

44. _____

11. _____

28. _____

45. _____

12. _____

29. _____

46. _____

13. _____

30. _____

47. _____

14. _____

31. _____

48. _____

15. _____

32. _____

49. _____

16. _____

33. _____

50. _____

17. _____

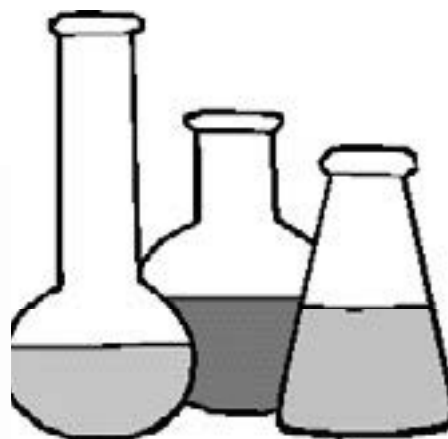
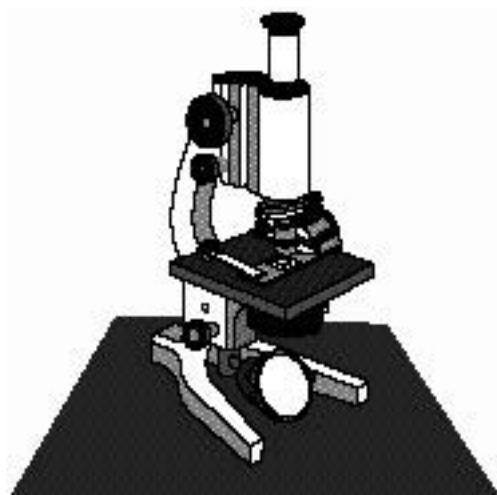
34. _____

INVITATIONAL 2022-2023

A+ ACADEMICS



University Interscholastic League



Science

**DO NOT OPEN TEST
UNTIL TOLD TO DO SO**

**UNIVERSITY INTERSCHOLASTIC LEAGUE
2022-2023 SCIENCE
INVITATIONAL TEST**

1. A student heats 50 mL of water and places it in a beaker. They then place a sugar cube in the heated water and records the temperature of the water every minute for ten minutes. In this experiment, what does the temperature represent?

A. Independent variable
B. Control
C. Dependent variable
D. Responsive variable

2. Based on the chemical equation, how many different elements and compounds are represented?



A. Elements – 3 Compounds – 2
B. Elements – 4 Compounds – 2
C. Elements – 2 Compounds – 3
D. Elements – 4 Compounds – 3

3. When a fruit is produced the energy located in the fruit is ___ energy until it is transformed during the process of digestion.

A. Kinetic
B. Electric
C. Chemical potential
D. Mechanical

4. Which of the following best explains why a hot dog is able to cook over a campfire when it is placed on a metal pole as shown?

A. Conduction
B. Convection
C. Radiation

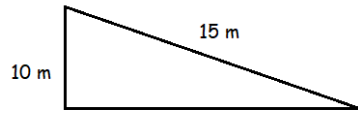


5. In which of tectonic plate would you find Rio de Janeiro, Brazil?

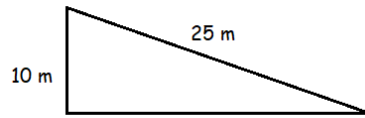
A. Pacific
B. Nazca
C. African
D. South American

6. Which of the following would require the least amount of force?

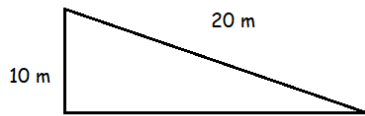
A.



C.



B.



D.

All are equivalent forces

7. The gravity on Mars is a little over one third of the gravity here on Earth. Of you could jump 3 meters on Earth, how far could you jump on Mars if you were to use the same amount of force?

A. 1 meter

C. 9 meters

B. 3 meters

D. 12 meters

8. A student has mistakenly classified this organism as being prokaryotic. Which evidence best explains the error in classification?

A. The cell has a nucleus

B. The cell is from a plant

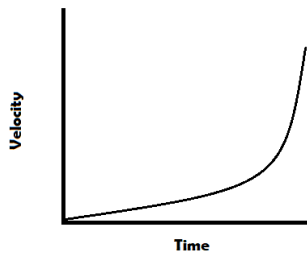
C. The cell lacks a nucleus

D. The cell is a bacteria

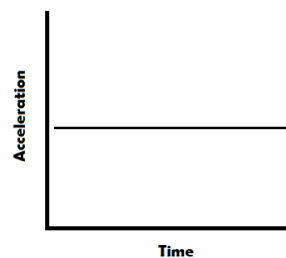


9. A train is moving at a constant velocity. Which graph best shows this?

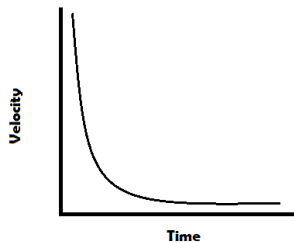
A.



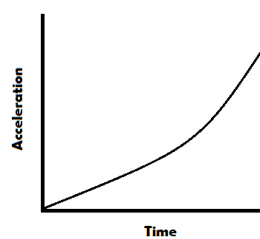
C.



B.



D.



10. Melting butter demonstrates which of the following?
 A. Physical change
 B. Chemical change
11. You find a ring with a mass of 107 g laying on the sidewalk. You fill a graduated cylinder up with 10 mL of water and put the ring into the cylinder. The water rises up to the 15 mL mark. Based on the table, what type of material is the ring made from?

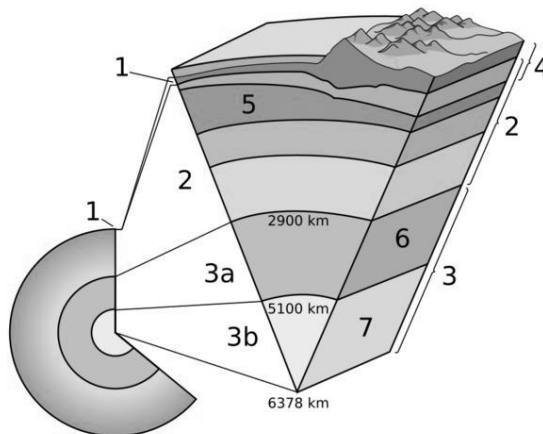
Density Table			
Material	Density (g/cm ³)	Material	Density (g/cm ³)
Copper	8.92	Gold	19.32
Platinum	21.4	Silver	10.49

- A. Copper
 B. Silver
 C. Gold
 D. Platinum
12. On a hot summer day, a child is selling lemonade. Which of the following items used in the lemonade would be the least dense?
 A. Cup
 B. Sugar
 C. Citric acid
 D. Ice
13. All of the following can be considered renewable except for –
 A. Hydroelectric dam
 B. Nuclear power plant
 C. Geothermal heating
 D. Windmills
14. Which of the following lists has only biotic factors?
 A. temperature, Daphnia, snail, guppy
 B. temperature, pH, conductivity, sunlight
 C. snail, guppy, Daphnia, algae
 D. snail, algae, guppy, sunlight

15. Which of the following will have a greater impact on kinetic energy of an object?
 A. Mass
 B. Velocity
 C. Gravitational force

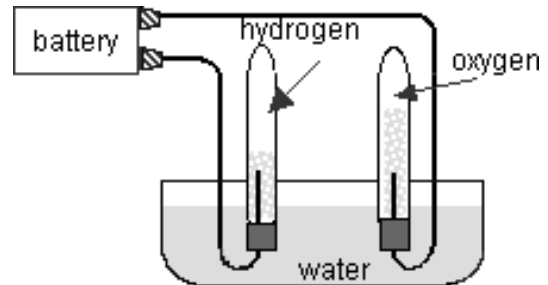
16. Looking at the model of the Earth, which structure is indicated at Position 4?

- A. Inner Core
 B. Outer Core
 C. Asthenosphere
 D. Lithosphere



17. Simple machines are useful when moving heavy objects because they-
- A. require less work
 - B. require less input force
 - C. do work for us
 - D. move things over shorter distances
18. Photosynthesis requires two raw materials. They are
- A. Chlorophyll and O_2
 - B. H_2O and sugar
 - C. H_2O and CO_2
 - D. O_2 and CO_2

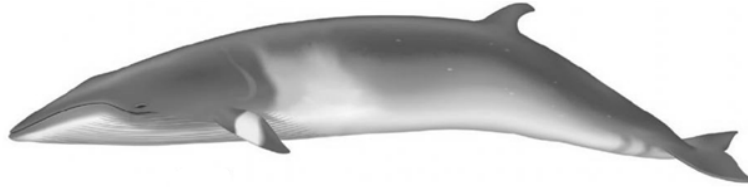
19. Based on the image, this best shows a –
- A. Chemical change
 - B. Physical change
 - C. Unbalanced reaction
 - D. Photosynthetic reaction



20. Mechanical or physical weathering is the process by which rock is broken down into smaller pieces by physical changes. Some ways that rock can be broken down physically include all of the following except:
- A. Temperature fluctuation
 - B. Abrasion
 - C. Oxidation
 - D. Plant growth
21. How can large volcanic eruptions and meteorite collisions have similar effects on Earth's climate?
- A. Both can cause the greenhouse effect to increase global warming
 - B. Both give off large forces that change the tilt of Earth's axis
 - C. Both cause acidic rain from the gases and particles they give off into Earth's troposphere
 - D. Both put huge volumes of dust and ash into the atmosphere, blocking the sun's energy
22. Earth supports life while the nearby Moon does not. All of the following are reasons why the Moon cannot support life compared to the Earth except:
- A. Abundance of water
 - B. Distance from Sun
 - C. Atmosphere
 - D. Lack of natural resources
23. An oak forest is an example of a climax community because of which of the following:
- A. The mature oak trees block sunlight below them, not allowing smaller trees and grasses to grow
 - B. The oak trees will grow and reproduce until they are disturbed or killed by man or nature
 - C. Oak trees are the largest vegetation that grows in the area
 - D. All of the above are true

24. Secondary succession will take place in each of these ecosystems except –
- A. An abandoned field
 - B. A shallow pool of water
 - C. A volcanic lava flow that forms a new island
 - D. A forest which has been clear-cut

25. Use the image and the Dichotomous key to correctly identify the whale shown.

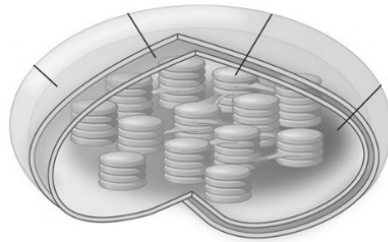


1a. Mouth with baleen (no teeth).....	6
1b. Mouth with teeth (no baleen).....	2
2a. Large melon (head)	Sperm Whale
2b. Small rounded head.....	3
3a. Distinct black and white markings on body	Orca
3b. Body mostly gray	4
4a. Has defined beak or “snout”	Bottlenose Dolphin
4b. No beak, rounded “snout”	6
5a. Specked markings on sides.....	Harbor Porpoise
5b. Body all gray, usually cover with scratches.....	Risso’s Dolphin
6a. Long pectoral fin/flippers with knobs on fins & head.....	Humpback Whale
6b. Shorter pectoral fin/flippers, smooth fins and head.....	7
7a. White band on pectoral fin/flipper	Minke Whale
7b. No white band on pectoral fin/flipper.....	8
8a. Body covered in barnacles, no dorsal fin, has dorsal knuckles	Gray Whale
8b. No barnacle growth on body, dorsal fin present.....	9
9a. Body solid blue color	Blue Whale
9b. Body with gray and white patterns	Fin Whale

- A. Orca
- B. Gray Whale
- C. Fin Whale
- D. Minke Whale

26. Which of these is a reaction to an internal stimulus?
- A. A runny nose when breathing dusty air
 - B. Itchy red skin when exposed to poison ivy
 - C. Your eyes become red and itchy when you are exhausted
 - D. Blisters on skin when sunburned

27. A designer who is building a new nose cone for rockets would choose materials with all these properties except
- A. Low density
 - B. High heat conductivity
 - C. Malleability
 - D. High melting point
28. Which of the following illustrates the hierarchy of cellular organization?
- A. cell, population, organ system, cell, community
 - B. molecule, cell, organ, organ system, organism
 - C. organism, organ system, population, organ, community
 - D. molecule, organ, organ system, organism, population



29. The structure seen is responsible for which of the following functions in a cell?
- A. Captures sunlight used in photosynthesis
 - B. Powerhouse of the cell
 - C. Directs cellular activities
 - D. Synthesizes and stores materials
30. An individual left a plant outside for several days without tending to it in the summer. The person noticed that the plant was beginning to wilt. Wilting in plants is a result of which of the following?
- A. Decrease in H_2O
 - B. Lack of CO_2
 - C. Increase in radiant energy
 - D. Decrease in O_2
31. If a diploid cell of an organism contains 90 chromosomes. What would an egg or a sperm cell of this organism would be expected to have this number of chromosomes?
- A. 90
 - B. 180
 - C. 45
 - D. 23
32. A neutral atom contains 20 neutrons, 18 electrons as well as protons. What would be the atomic number of this particular atom?
- A. 18
 - B. 20
 - C. 28
 - D. 40

33. Which best describes the following scenario:
A drone taking off and heading south at 25 kilometers per hour
- A. An example of speed
 - B. An example of acceleration
 - C. An example of speed and acceleration
 - D. An example of velocity and acceleration

3	6,94*	Li
11	22,99	Na
19	39,10	K
37	85,47	Rb
55	132,9	Cs

34. What do the elements shown to the right have in common?
- A. They are noble gases
 - B. They do not form compounds with any other elements
 - C. They react with water to form salts
 - D. They are silvery solids that react with non-metals

35. Scientists can tell that the sun rotates on its axis by observing which of the following:
- A. How the sunspots moving across the sun's surface from East to West
 - B. Changing magnetic forces coming from the sun
 - C. Fluctuating amounts of solar winds due to solar flares
 - D. Time that the sun rises and sets on Earth
36. Spring Tide occurs when
- A. There is a full moon
 - B. The Sun, Moon, and Earth are all aligned
 - C. At the first quarter and third quarter moons
 - D. When the Sun and Earth are the at their perihelion
37. Oxygen has an atomic number of 16. How many more electrons will it take to fill the valence shell and make it stable?
- A. 1 B. 2 C. 3 D. 8
38. The Virgo Cluster, unlike most other galaxies in the universe, has been observed with a blue shift. What does this mean?
- A. Movement of the source toward the observer
 - B. Movement of the source away from the observer
 - C. The source is not moving

39. Which of the following stars would have the lowest surface temperature?
- A. A Red dwarf
 - B. A White star
 - C. A Red Giant
 - D. A Yellow Star
40. Redshift and blueshift are used by astronomers to work out how far an object is from Earth. The concept of redshift and blueshift is closely related to which of the following
- A. Big Bang Theory
 - B. Theory of Relativity
 - C. Doppler Effect
 - D. Coulomb's Law
41. Which of the following would most likely result from a collision between a continental lithospheric plate and an oceanic lithospheric plate?
- A. Volcanic island arc
 - B. Chain of coastal volcanic mountains
 - C. Mid-oceanic ridge
42. If an active cold front overtakes a warm front which of the following occurs:
- A. An occluded front forms
 - B. The fronts cancel each other out due to interference
 - C. Cloud formation increases
 - D. A stationary front forms
43. Another form of interdependence between organisms is called symbiosis. There are several types of symbiosis. The difference between each type is determined by how beneficial or harmful the relationship is to the organisms. When one organism benefits and the other one remains constant or neutral, this is called...
- A. Mutualism
 - B. Commensalism
 - C. Colonialism
 - D. Parasitism
44. Only ten percent of energy stored in an organism is passed on to the next higher trophic level. Of the remaining energy, some is used for life processes, and the rest is
- A. Used in reproduction
 - B. Stored in lipids
 - C. Stored in muscles
 - D. Eliminated as thermal energy
45. During the drought in Texas, numerous deer temporarily left their usual territory to drink from water troughs that were being filled by farmers and ranchers. This behavior was probably due to:
- A. The need to find different food sources
 - B. The change in an abiotic factor in its natural environment
 - C. The need to find a new habitat
 - D. The change in a biotic factor in its natural environment

46. An excess of hot water is released into a reservoir, which of the following is most likely to immediately occur?
- A. An increase in pollution in the bay
 - B. A decrease of pollution in the bay
 - C. A decrease in the dissolved oxygen level
 - D. An increase in carbon-based compounds
47. Suppose you were making a circle graph of the following information about a laboratory budget. They said that 5% of their budget goes to consumables, 10% goes into equipment, 80% of the monthly income goes to paying all debts, and the remaining 5% is used for miscellaneous expenses that arise. How large of a section, in degrees, would the debts take up?
- A. 360° B. 288° C. 36° D. 18°
48. A spilled liquid base can be best neutralized with:
- A. Sodium bicarbonate
 - B. Water
 - C. Hydrochloric acid
 - D. Sodium hydroxide
49. When a scientist compares two objects or events, what is he or she most likely looking for?
- A. How the data was collected
 - B. Causes and effects for the data
 - C. Similarities in the data
 - D. Errors in the data collection
50. Which of the following is most likely correct?
- A. You can accept or reject a hypothesis, but never prove it to be true
 - B. You can always prove a hypothesis to be true
 - C. You can always prove a hypothesis to be false
 - D. Accepting or rejecting a hypothesis is the same as proving whether or not the hypothesis is true

**UNIVERSITY INTERSCHOLASTIC LEAGUE
2022-2023 SCIENCE
INVITATIONAL TEST**

Answer Key

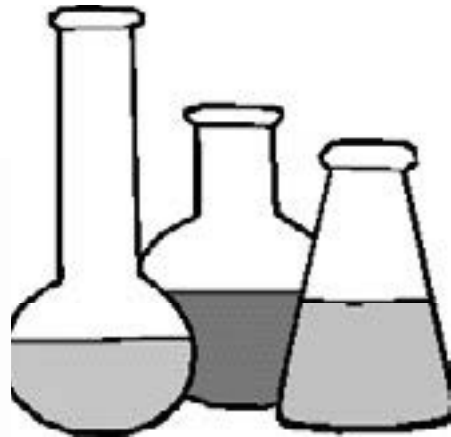
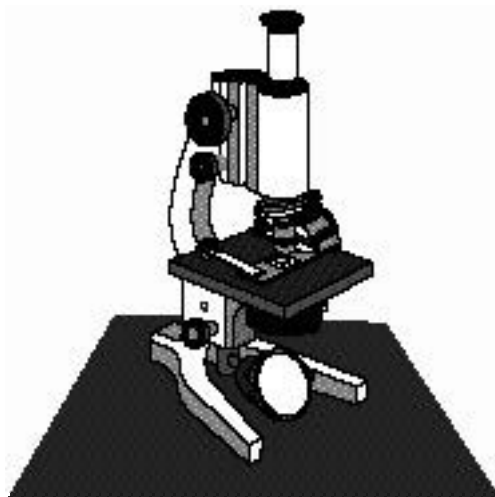
1. A	18. C	35. A
2. B	19. A	36. B
3. C	20. C	37. B
4. A	21. D	38. A
5. D	22. B	39. A
6. C	23. D	40. C
7. C	24. C	41. B
8. A	25. D	42. A
9. C	26. C	43. B
10. A	27. B	44. D
11. D	28. B	45. B
12. D	29. A	46. C
13. B	30. A	47. B
14. C	31. C	48. A
15. B	32. A	49. C
16. D	33. D	50. D
17. B	34. D	

FALL/WINTER DISTRICT 2022-2023

A+ ACADEMICS



University Interscholastic League

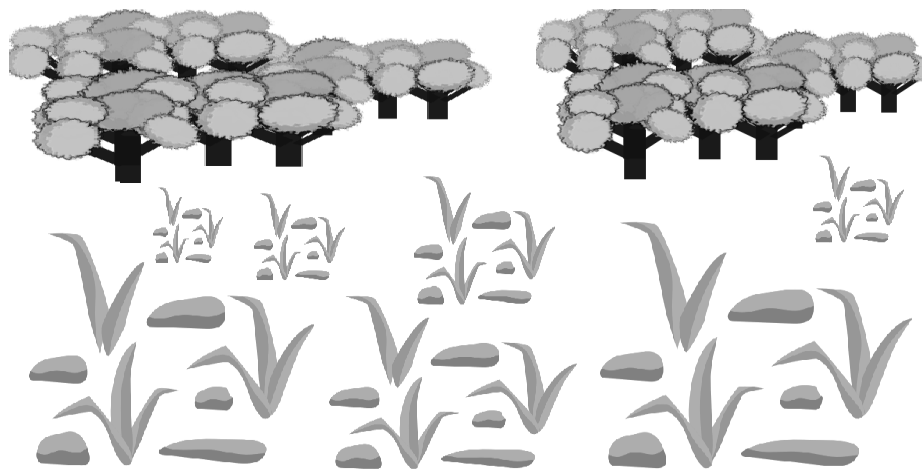


Science

**DO NOT OPEN TEST
UNTIL TOLD TO DO SO**

**UNIVERSITY INTERSCHOLASTIC LEAGUE
2022-2023 SCIENCE
FALL/WINTER DISTRICT TEST**

1.



Students are labeling the illustration with the most abundant elements. Which list of elements best labels the living matter represented in the illustration?

- A. O, S, H
- B. Na, H, O

- C. C, H, O
- D. Na, S, He

2. Which of the following is not a good characteristic to use to determine the type of mineral?

- A. Shape
- B. Color

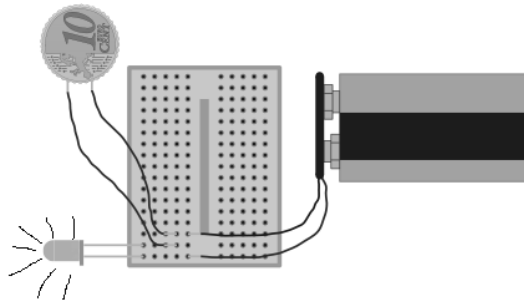
- C. Hardness
- D. Luster

3. What happens to the motion of gas molecules as the air temperature drops below zero degrees Celsius?

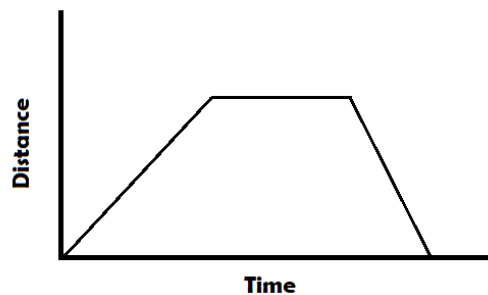
- A. Molecules move more randomly
- B. Molecular speed decreases
- C. Molecular speed increases
- D. Molecule remain constant

4. Due to increased temperature and pressure sedimentary rocks can transform into metamorphic rocks. What other type of rock transformation can have increased temperature and pressure also form?

- A. Igneous to metamorphic
- B. Sediment to sedimentary
- C. Metamorphic to sediment
- D. Igneous to sediment



5. The light turned on when the item was placed in the circuit as shown. The item could not be classified as a –
- Metal
 - Metalloid
 - Non metal
 - Semiconductor
6. An individual changes the color of the bottom of a swimming pool from beige to black because they heard it would increase the temperature of the water in the pool. The new color will help warm the pool water by transforming –
- Nuclear energy from the sun
 - Chemical energy in the paint
 - Thermal energy from the paint
 - Radiant energy from the sun
7. A plant grown on Earth and on the ISS would most likely differ in which way?
- Pigments of leaves
 - Shape of roots
 - Phototropism
 - Minerals needed
8. What type of motion would best describe the motion of the graph shown?
- Launch of a rocket
 - Driving to school and back
 - Flight to Canada
 - Motion of clock hands

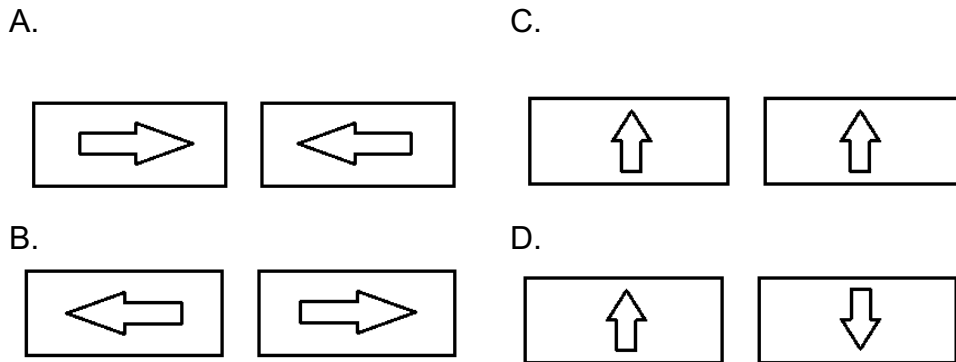


9. There are four ramps all at an incline of 25 degrees, the only different is the distance at which it takes to push the box up the ramp. Which of the following would require the least amount of force to lift a box?
- Ramp of 10 meters
 - Ramp of 20 meters
 - Ramp of 25 meters
 - All the same

10. The following tables shows the development of space exploration in stages. Which item correctly completes the missing area?

First satellite launched into orbit
Animals sent into space
Humans walk on the moon
?

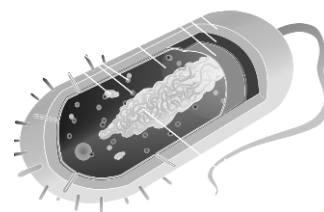
- A. Humans to outer space
 B. Explorer I launches
 C. ISS sent into orbit
 D. Pioneer I launched
11. Which shows the correct movement of the tectonic plates where the location of the Andes mountains formed?



12. Some plants use brightly colored flowers to attract pollinators. Which is the most likely conclusions about a plant that has small flowers that are hard to see?
- A. Doesn't produce a seed
 B. Wind pollination plant
 C. Ornamental plant
 D. Reproduce binary fission

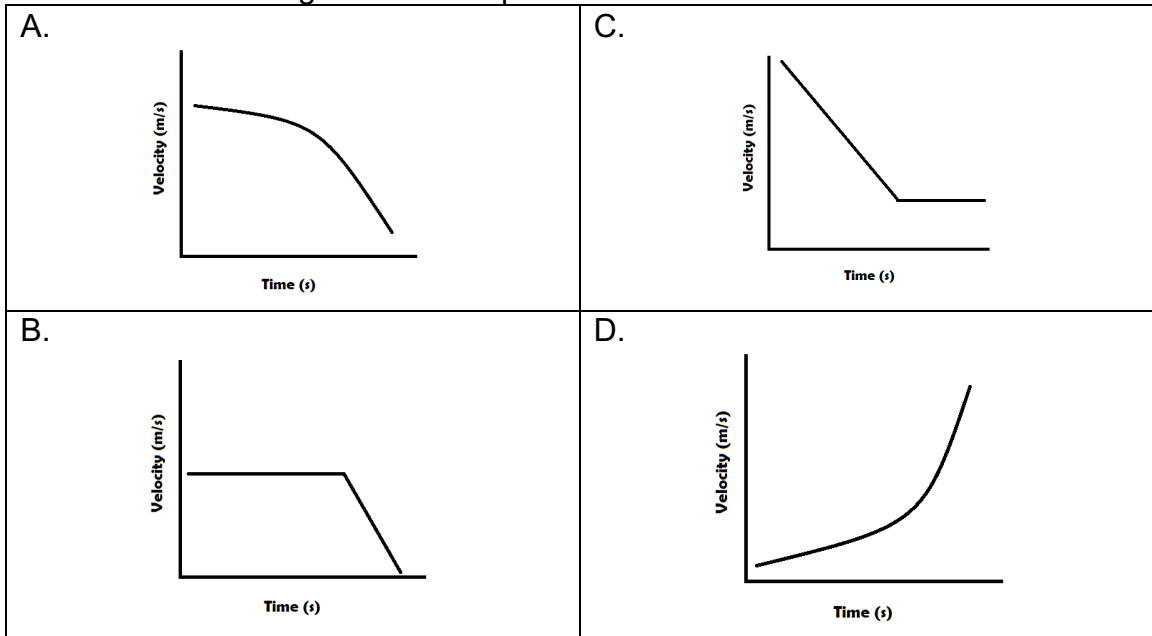
13. A student has classified this cell as being prokaryotic. What evidence is there to support this claim?

- A. Cell has a nucleus
 B. Cell is from an animal
 C. Cell lacks a nucleus
 D. Cell is from a plant

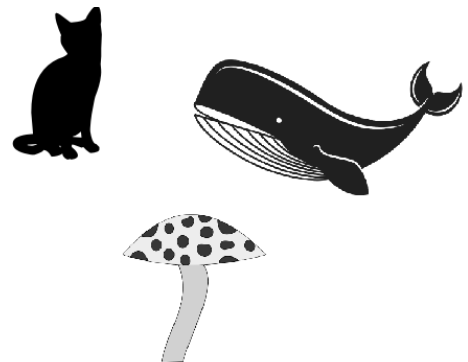


14. Which Texas region would most be affected by wind erosion?
- A. Panhandle
 - B. Pineywoods
 - C. Hill Country
 - D. All areas are the same
15. The instructions for a lab warned to avoid putting K in the liquid used in the lab. What element should not be placed in the liquid?
- A. Nitrogen
 - B. Carbon
 - C. Potassium
 - D. Krypton

16. Which of the following would show positive acceleration?



17. What do the three organisms have in common?
- A. All autotrophic
 - B. Composed of cells
 - C. All are omnivores
 - D. Are mammals

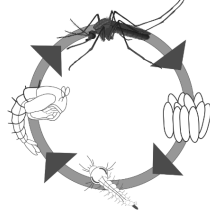


18. According to the US EPA, too much ground water discharge to streams can lead to erosion and alter the balance of aquatic plants and animals. Which human activity does this likely refer to?

- A. Hurricane
- B. Pumping water into the ground for gas extraction
- C. Overfishing
- D. Deforestation

19. Which image best shows an ecosystem?

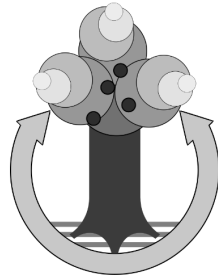
A.



C.



B.



D.



20. As the sun begins to die, in roughly 5 billion years, it will expand. Why will the Earth no longer be in the habitable zone?

- A. Gravity will increase
- B. Tides will increase
- C. Earth will become too hot
- D. Gravity will cause the asteroid belt to move into a closer orbit

21. Which environment would experience the greatest change in total number and type of species over time?

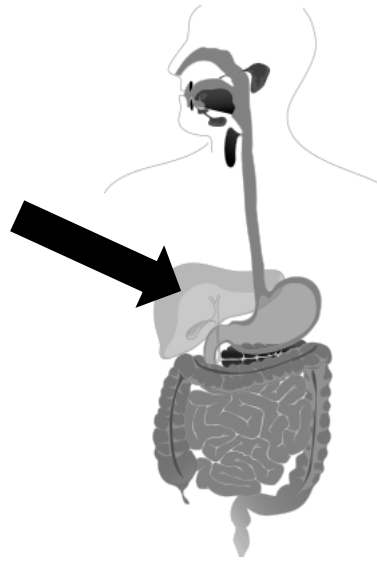
- A. Pioneer species
- B. Intermediate species
- C. Secondary succession
- D. Climax community

22. A swim bladder is an internal gas filled organ that contributes to the ability of many bony fish to do which of the following?

- A. Allows the fish to see deeper in the water
- B. Allows the fish to scare off predators by increasing in size
- C. Allows for extra storage of food
- D. Allow the fish to vary buoyancy in water

23. What is represented by the arrow in the diagram?

- A. Tissue
- B. Organ system
- C. Organ
- D. Cell



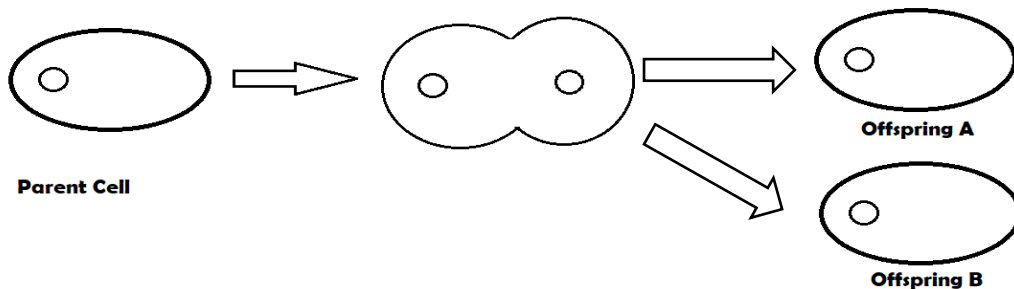
24. If a human notices a decrease in the production of urine, this could mean that the body could be having which of the following?

- A. Fever
- B. Dehydration
- C. Asthma
- D. Broken bone

25. A student is looking at a family photo album. The student notices that they look very similar to their great grandparents. What allows them to look similar to their relatives?

- A. Similar chromosomes
- B. Similar proteins
- C. Similar thylakoids
- D. Similar cell walls

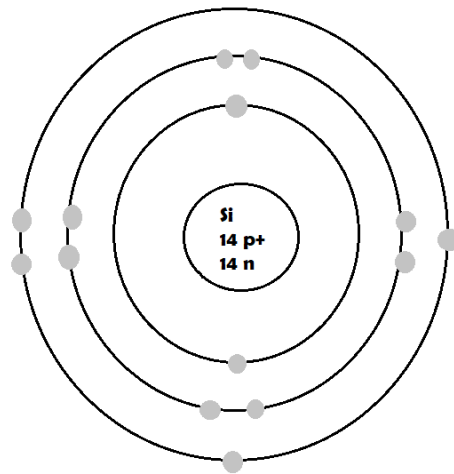
26. Based on the illustration. Which statement about the cells is correct?



- A. Bile destroys the genetic info in the parent cell which left the offspring viable
- B. Cells reproduce slowly due to acids within the organisms
- C. Cell A has different genetic information compared to Cell B
- D. Cell A has identical genetic information compared to Cell B

27. Which animal cell organelle is capable of reproducing independently within the cell?
- A. Cell wall
B. Mitochondria
C. Chloroplast
D. Vacuole
28. A volleyball player notices that the harder the ball is hit, the more their hand hurts afterwards. Which law best explains this?
- A. Newton's 1st Law of motion
B. Newton's 2nd Law of motion
C. Newton's 3rd Law of motion
D. Newton's 0th Law of motion
29. Students place a plant in a dark, windowless closet for two days. Which of these will help the plant maintain homeostasis?
- A. Growth of deeper roots
B. Using stored sugars
C. Decreasing diameter of the stem
D. Going dormant

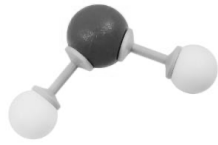
30. In the Bohr model of the atom shown, how many more electrons would it take to fill the valence shell and be stable
- A. 2
B. 4
C. 8
D. 0



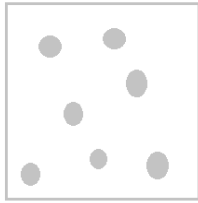
31. Students are given an activity which they are asked to classify the types of energy present in various physical situations found around their school. Which of the following best represents a conclusion that the students might write about in a lab report over the activity?
- A. All objects with kinetic energy can be found over 3 meters high.
B. All objects with kinetic energy are cold.
C. All objects with kinetic energy are macroscopic.
D. All objects with kinetic energy must be in motion.

32. Which best illustrates a compound?

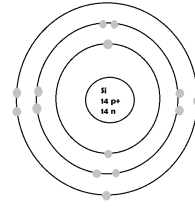
A.



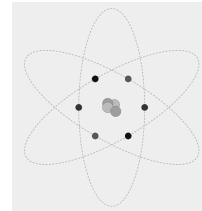
B.



C.



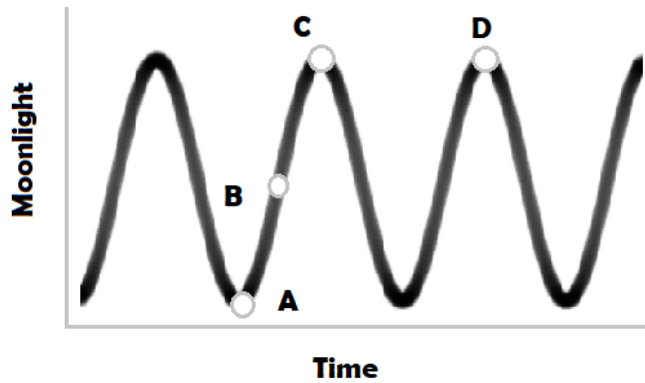
D.



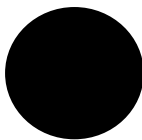
33. In an energy pyramid, at what level is the most usable energy available?

- A. Primary consumer
- B. Producer
- C. Secondary consumer
- D. Decomposer

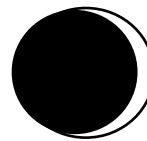
34. Based on the graph, what moon phase matches point B?



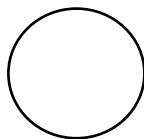
A.



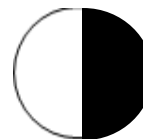
C.



B.



D.



35. Which star listed will have the largest numerical value for apparent magnitude?
- A. Our moon
 - B. White dwarf
 - C. Blue white super giant
 - D. Red giant
36. The very large array is a compilation of twenty-seven radio telescopes used to capture radio waves. The entire array is arranged with diameters of around 22 miles. Why are radio telescopes so large?
- A. Radio waves are very difficult to detect
 - B. Only certain stellar objects emit radio waves
 - C. So the radio waves can be controlled remotely
 - D. The wavelength of waves can be as long as mountain ranges
37. This individual helped strengthen the theory of plate tectonics. Before this person's explanations, most scientists believed that the continents did move but there were no good explanations. This person suggested the ocean floor moved and could push landmasses. The individual provided evidence using seafloor spreading to explain how continents move?
- A. Hess
 - B. Wegner
 - C. Hutton
 - D. Einstein
38. Ocean currents move warm and cold water throughout the oceans affecting weather and climate worldwide. Where do cold ocean currents originate from?
- A. Near the equator
 - B. Near the continents
 - C. Near the poles
 - D. In the middle of the oceans
39. A student is working with several chemicals in a lab. They wonder what would happen if they mixed the chemicals together. Which of the following should they not do?
- A. Wait for the teacher's instructions
 - B. Taste the chemicals before mixing them
 - C. Mix chemicals without instructions
 - D. Read the entire procedures for the lab before mixing any chemicals
40. A study of plant roots over time in an area showed that early plants had shallow root systems that stayed near the surface. Most recent plant life in the same area showed root systems that extend deep into the ground. Based on this information, plant species in this area lived changed from –
- A. Mountain region to hills
 - B. Forest to tundra
 - C. Grassland to desert
 - D. Desert to tundra

41. When commercial airplanes have to land or take off on short runways, it can be a rough flight. Why might passengers consider it unpleasant?
- A. The shorter the runways, the acceleration for takeoff or landing has to be greater.
 - B. The sight of a short runway can make people nervous.
 - C. The sight of the short runway can distract the pilots.
 - D. The runways are shorter, the velocity for takeoff or landing has to be lower.
42. This lab equipment is used to hold and heat small amounts of a liquid but doesn't have marked measurements. Which piece of equipment best identifies it?
- A. Graduated cylinder
 - B. Beaker
 - C. Pipette
 - D. Test tube
43. When someone talks about "how fast", what are they actually referring to?
- A. Time
 - B. Velocity
 - C. Speed
 - D. Acceleration
44. The heights of twins are measured yearly. What type of graph would be used to represent this?
- A. Line graph
 - B. Scatter plot
 - C. Bar graph
 - D. Circle graph
45. Which group readily donates electrons?
- A. Noble gases
 - B. Metals
 - C. Non-metals
 - D. Halogens
46. This is a comprehensive explanation of some aspect of nature that is supported by a vast body of evidence. Which of the following would not be an example of the previous description?
- A. The Big Bang
 - B. Plate Tectonics
 - C. Evolution by natural selection
 - D. Universal Gravitation
47. Elements in Group 18 are referred to as the noble gasses. What makes these elements unlikely to react?
- A. Number and placement of the electrons
 - B. Number of ions present
 - C. Number and placement of the neutrons
 - D. Number of protons

48. This individual developed a mathematical model for the structure of the nuclear shells of atoms. The theory of the structure of nuclear shells illustrated that protons and neutrons pair up within the nucleus of the atom. What scientist does this most likely refer to?
- A. Yalow
 - B. Rutherford
 - C. Goeppert – Mayer
 - D. Thomson
49. Two theories for the origins of the universe were discussed in class. The Big Bang Theory as well as the Big Crunch Theory. One main difference between the two is that –
- A. The date on which the universe started
 - B. How the universe began
 - C. The purpose of the universe
 - D. How the universe changes
50. How are humans classified within a food web?
- A. Autotrophic
 - B. Consumers
 - C. Decomposers
 - D. Producers

**UNIVERSITY INTERSCHOLASTIC LEAGUE
2022-2023 SCIENCE
FALL/WINTER TEST**

Answer Key

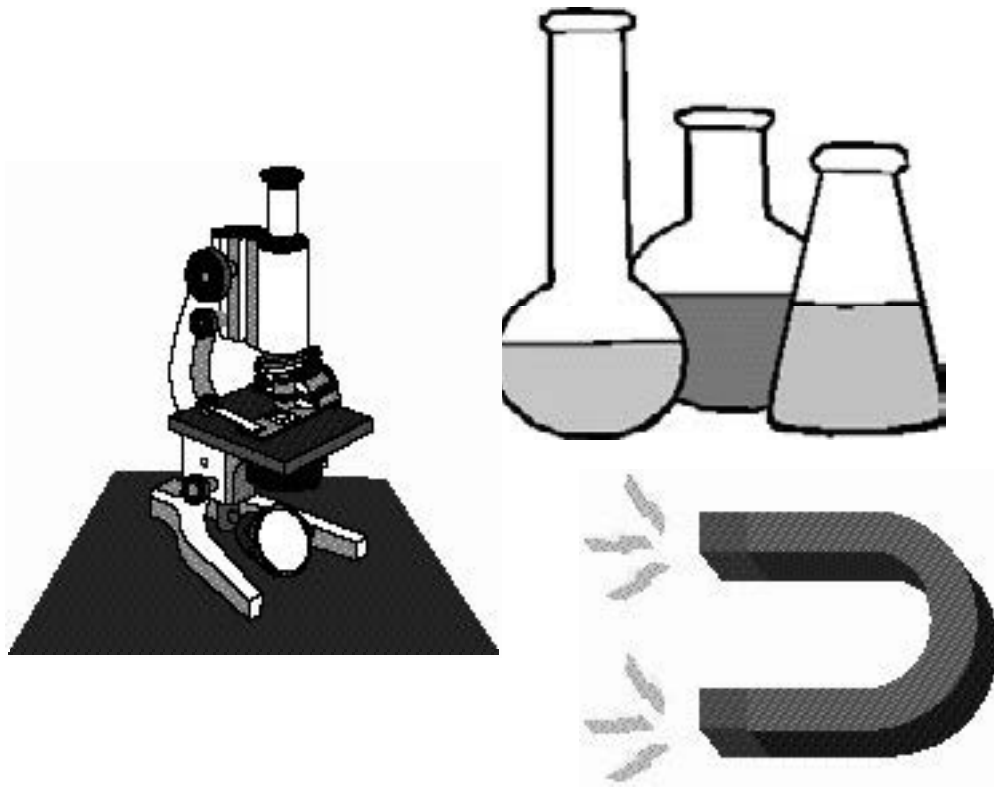
1. C	18. B	35. C
2. A	19. C	36. D
3. B	20. C	37. A
4. A	21. B	38. C
5. C	22. D	39. B
6. D	23. C	40. C
7. C	24. B	41. A
8. B	25. A	42. D
9. C	26. D	43. C
10. C	27. B	44. A
11. A	28. C	45. B
12. B	29. B	46. D
13. C	30. B	47. A
14. A	31. D	48. C
15. C	32. A	49. D
16. D	33. B	50. B
17. B	34. D	

SPRING DISTRICT 2022-2023

A+ ACADEMICS



University Interscholastic League



Science

**DO NOT OPEN TEST
UNTIL TOLD TO DO SO**

**UNIVERSITY INTERSCHOLASTIC LEAGUE
2022-2023 A+ SCIENCE
SPRING TEST**

1. Which of the following does not represent the meaning of an element?
- A. A stone made entirely of granite
 - B. A gum ball machine with different sized and colored gum balls
 - C. A package of shredded iceberg lettuce
 - D. A wall made of identical cinder blocks
2. Based on the chemical equation, how many different elements and compounds are represented?

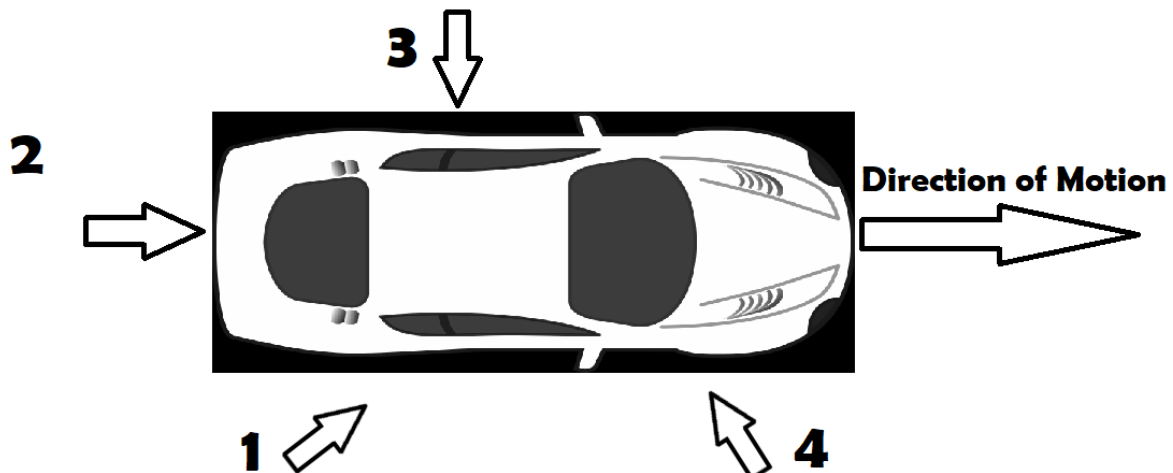


- A. Elements – 2; Compounds – 4
 - B. Elements – 4; Compounds – 3
 - C. Elements – 3; Compounds – 3
 - D. Elements – 2; Compounds – 2
3. What is an ecological model of the relationships that form a network of complex interactions among organisms in a community from producers to decomposers?
- A. Food web
 - B. Food chain
 - C. Ecosystem
 - D. Population
4. A neutral atom contains the following particles. What is its mass number?

Neutron	17
Electron	11
Proton	?

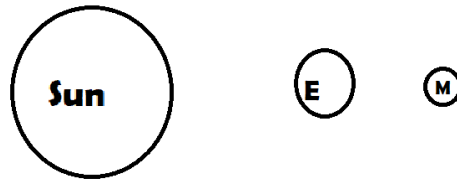
- A. 11 B. 17 C. 28 D. 45
5. Most scientists believe that atomic interactions depend primarily on the arrangement of valence electrons. This is most supported by observations of similar reactions of elements located –
- A. With similar number of protons
 - B. With similar mass numbers
 - C. In a period on the periodic table of elements
 - D. In a group on the periodic table of elements

6. A teacher puts two tablets into a liquid in a cup. The teacher stirs the liquid with the tablet submerged using a stirring rod and it begins to bubble. Which is less dense than the liquid in the cup?
- A. Tablet
B. Glass
C. Spoon
D. Bubbles
7. What property stays the same during both a physical and a chemical change?
- A. Density
B. Color
C. Mass
D. Particle arrangement
8. A car is moving down the street as shown. Which force will only affect the speed of the car?



- A. 1 B. 2 C. 3 D. 4
9. Which best describes the scenario below:
An airplane taking off traveling at 275 km/hr
- A. Example of speed
B. Example of velocity
C. Example of speed and acceleration
D. Example of velocity and acceleration
10. Which of the following describes a human activity that uses up non-renewable resources?
- A. Plowing topsoil and causing erosion
B. Cooking on a gas grill
C. Gathering fire wood for a camp fire
D. Electricity from a hydroelectric dam
11. This is the process of transforming chemical energy into forms of usable energy by the organisms?
- A. Photosynthesis
B. Homeostasis
C. Cellular respiration
D. Excretion

12. Using the diagram, what time would there be a high tide?

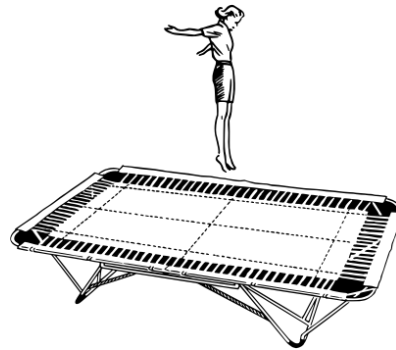


- A. 3 PM B. 6 PM C. 9 PM D. 12 PM

13. A marble, golf ball, and tennis ball all fall off a table towards the ground at the same time. The objects all hit the ground at the same time because each has the same –

- A. Acceleration
B. Inertia
C. Weight
D. Size

14. When the springs are compressed on the trampoline an increase of _ will occur.



- A. Chemical energy
B. Kinetic energy
C. Electrical energy
D. Potential energy

15. Which event would most likely have the effect of impacting the world's climate by lowering the temperatures as well as plant growth rate slows down?

- A. Hurricane C. Tornado
B. Large volcanic activity D. Large landslides

16. Main sequence stars like our sun tend to appear in the yellow range of visible light. Older stars generally tend to appear red. Blue stars are considered young stars and tend to burn –

- A. Very hot C. Similar temperature to our sun
B. Extremely cool D. Forever

17. Who proposed the closed universe theory?

- A. Einstein C. Copernicus
B. Friedman D. Ptolemy

18. Which of the following best explains why cold air displaces warm air?

- A. Convection
B. Conduction
C. Radiation

19. Students make a list of materials that are needed for humans to survive in space. Which item listed would account for the fact that space is a vacuum and can cause extreme temperatures?
- A. Solar panels
B. Electric heater
C. Rocket engines
D. Water
20. Some mountain ranges, such as the Alps, increase in elevation because of –
- A. Seafloor spreading
B. Earthquakes
C. Motion of the tectonic plates
D. Tsunamis
21. Oceanic and continental are two types of Earth’s –
- A. Core
B. Elements
C. Atmosphere
D. Crust
22. In which major tectonic plate would you find Paris, France?
- A. Pacific
B. Nazca
C. Eurasian
D. African
23. Students observe many different organisms living in a grassy field but they do not see any frogs. Which changes would most likely allow for frogs to live in this field?
- A. Landslide
B. Diversion of a stream to flow through the field
C. Grassfire
D. Increase in predators
24. On a hot summer day, a person steps onto asphalt from the grass while barefooted. Why does the asphalt seem so much warmer?
- A. Asphalt has a lower specific heat
B. Grass has a lower specific heat
C. Asphalt has a higher specific heat
D. Grass and asphalt have the same specific heat
25. A student made the following chart.

Group 1	Group 2
Mars	Neptune
Venus	Uranus
Mercury	Jupiter

- How did the student most likely use to separate the sets of planets?
- A. With and without satellites
B. With and without water
C. With and without atmospheres
D. Gas and terrestrial planets



26. The moon has about 1/6 the amount of gravitational force as Earth. If you can jump four meters on Earth, about how many meters can you jump on the moon using the same force?

- A. .24 m
- B. 2 m
- C. 24 m
- D. 12 m

27. Using the following information identify the insect.



1. Does the insect have wings? Remember most adult insects have 2 pairs of wings, but they're not always visible.	a. Yes	go to step 2
	b. No	Order Hemiptera
2. Does the insect have parallel wings?	a. Yes	go to step 3
	b. No	go to step 4
3. Does the insect have a parallel line down the back that divides the wings?	a. Yes	Order Coleoptera
	b. No	Order Orthoptera
4. Does the insect have 4 total wings?	a. Yes	go to step 5
	b. No	Order Diptera
5. Does the insect have long antennae?	a. Yes	go to step 6
	b. No	Order Odonata
6. Does the insect have a small body with large fan-shaped wings?	a. Yes	Order Lepidoptera
	b. No	Order Hymenoptera


- A. Order Hemiptera
- B. Order Hymenoptera

- C. Order Lepidoptera
- D. Order Orthoptera

28. Which relationship is most like a tick and dog?

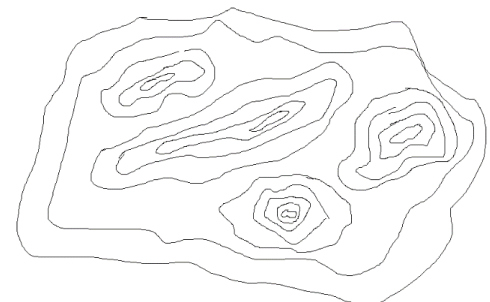
- A. *Ceratocystis fagacearum* & oak trees
- B. Hummingbird & flowers

- C. Fish & bear
- D. Goby fish & shrimp

29. Domains bacteria and eukarya are distinguished by:
- All bacteria are single celled and all eukarya are multicellular
 - Bacteria get nutrients from absorption and eukarya by photosynthesis
 - Only bacteria can grow and reproduce
 - Only eukarya have genetic material
30. Which pair best matches the pair of phrases below?
 children on a playground – park complex
- Population – ecosystem
 - Abiotic – biotic
 - Hypothesis – conclusion
 - Igneous – sedimentary
31. A class was studying human body systems. Students learned about a system that secretes hormones and regulates bodily processes. This is most likely the ____ system.
- Circulatory
 - Endocrine
 - Digestive
 - Excretory
32. Which of these can be found in a plant cell but not in an animal cell?
- Chromosome
 - Mitochondria
 - Ribosomes
 - Thylakoid
33. Two materials are mixed together in a plastic bag in the hopes of producing carbon dioxide. Which is the best evidence showing a chemical reaction has taken place to produce carbon dioxide?
- A color change
 - A precipitate is formed
 - Expansion of the sealed bag
 - An endothermic reaction occurred
34. A ball is tossed as shown.
- What force(s) cause this path?
- Inertia
 - Adhesion and cohesion
 - Forward speed and gravity
 - Spring forces
- 
35. Which of the following domains lack a nucleus but has a cell wall?
- Eukarya
 - Bacteria
 - Archaea
 - Bacteria and Archaea
36. In a plant, this describes growth in response to contact with another solid object.
- Hydrotropism
 - Thigmotropism
 - Phototropism
 - Heliotropism

37. Which of the following is not a result of heredity?
- A person only wearing designer clothes
 - A child that has blue eyes like his father
 - A child that has cystic fibrosis just like a grandparent
 - Triplets that all have red hair like their mother
38. Which system of the human body has a similar function to that of some cilia?
- Circulatory
 - Skeletal
 - Muscular
 - Endocrine
39. Using selective breeding, a new type of grain was produced for crop production in areas where the summer growing season is short. Which trait would be most useful for these farmers that will be planting this new grain?
- Extra-large seed size
 - Fast growing rate
 - Long stem length
 - Shallow root system
40. Which of the following is not considered a major benefit of recycling?
- Reducing consumption
 - Saves energy
 - Keeps materials out of landfills
41. Which would result in the most diverse offspring?
- A Self-pollinating flower
 - Butterflies pollinating from one flower to another
 - Planting cuttings from an African violet
 - Paramecia reproducing asexually
42. Which is not a reason why biodiversity is important?
- Biodiversity loss decreases the water quality
 - Species act as natural pest control
 - Too many species in an ecosystem
 - Promotes healthier maintained ecosystems
43. When it is summer in the Northern hemisphere, the Southern hemisphere would be experiencing?
- Winter
 - Spring
 - Summer
 - Fall
44. How many peaks are illustrated on this map?

- 1
- 2
- 3
- 4



45. Changes in the thickness of polar ice caps likely indicate changes in –
- Decreased solar flares
 - Earth's climate
 - Biodiversity of the artic
 - Increased fault activity
46. After a flood, scientists studying aquatic plants showed a decline in the rate of photosynthesis. Increases in the sediment lowers the amount of light in the water. Why would a decline in this rate lead to a decrease in the aquatic plant population?
- There is less water for absorption
 - There is less soil for nutrients
 - There is less radiant energy provided by the sun
 - There is less energy for reproduction
47. Which of the following is only part of a comparative investigation?
- Observations
 - Procedures
 - Variables
 - Data, graphs, and analysis
48. What is the length of the line above the ruler?



- 98 cm
 - 5.8 cm
 - 9.8 cm
 - 58 cm
49. Which of the following is not a scientific model?
- A computer program that shows the formation of mountain ranges
 - A computer program used to predict the weather
 - A dinosaur skeleton in a museum
 - A data table used to show information from a lab
50. This individual is credited with creating the Harvard Classification Scheme to classify stars based on their temperatures. This individual also catalogued 230,000 stars and discovered three hundred of these stars.
- Russell
 - Cannon
 - Hertzsprung
 - Galileo



**UIL A+ SCIENCE CONTEST
SPRING TEST
2022-2023
ANSWER KEY**

1. B	18. A	35. D
2. C	19. B	36. B
3. A	20. C	37. A
4. C	21. D	38. C
5. D	22. C	39. B
6. D	23. B	40. A
7. C	24. A	41. B
8. B	25. D	42. C
9. A	26. C	43. A
10. B	27. C	44. D
11. C	28. A	45. B
12. D	29. B	46. D
13. A	30. A	47. C
14. D	31. B	48. B
15. B	32. D	49. D
16. A	33. C	50. B
17. B	34. C	

CONTESTANT NUMBER:

FOR GRADER USE ONLY

Score Test Below:

_____ Initials _____

_____ Initials _____

Papers contending to place:

_____ Initials _____



**University Interscholastic League
A+ Social Studies Contest • Answer Sheet**

Write your contestant number in the upper right corner, and circle your grade below.

Circle Grade Level: 5 6 7 8

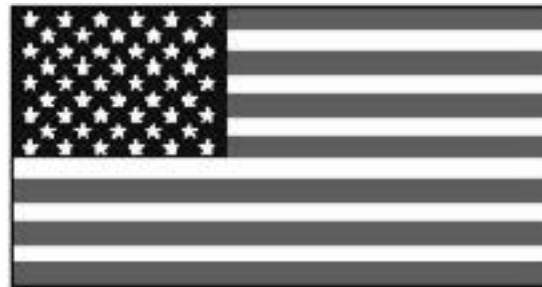
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|-----|---|---|---|---|-----|---|---|---|---|
| 1. | A | B | C | D | 21. | A | B | C | D |
| 2. | A | B | C | D | 22. | A | B | C | D |
| 3. | A | B | C | D | 23. | A | B | C | D |
| 4. | A | B | C | D | 24. | A | B | C | D |
| 5. | A | B | C | D | 25. | A | B | C | D |
| 6. | A | B | C | D | 26. | A | B | C | D |
| 7. | A | B | C | D | 27. | A | B | C | D |
| 8. | A | B | C | D | 28. | A | B | C | D |
| 9. | A | B | C | D | 29. | A | B | C | D |
| 10. | A | B | C | D | 30. | A | B | C | D |
| 11. | A | B | C | D | 31. | A | B | C | D |
| 12. | A | B | C | D | 32. | A | B | C | D |
| 13. | A | B | C | D | 33. | A | B | C | D |
| 14. | A | B | C | D | 34. | A | B | C | D |
| 15. | A | B | C | D | 35. | A | B | C | D |
| 16. | A | B | C | D | 36. | A | B | C | D |
| 17. | A | B | C | D | 37. | A | B | C | D |
| 18. | A | B | C | D | 38. | A | B | C | D |
| 19. | A | B | C | D | 39. | A | B | C | D |
| 20. | A | B | C | D | 40. | A | B | C | D |

INVITATIONAL 2022-2023

A+ ACADEMICS



University Interscholastic League

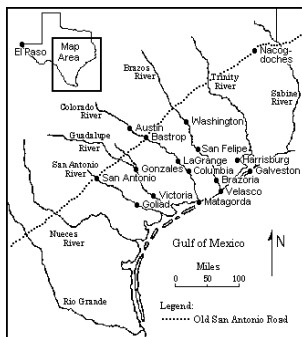


Social Studies

grades 7 & 8

**DO NOT OPEN TEST
UNTIL TOLD TO DO SO**

UNIVERSITY INTERSCHOLASTIC LEAGUE 2022-23 A+ SOCIAL STUDIES INVITATIONAL – GRADES 7-8



1. Where was Mier y Teran when he wrote a letter to the President of Mexico about the conditions in Texas?
 - a. Galveston
 - b. Nacogdoches
 - c. San Antonio
 - d. San Felipe de Austin

2. What impact did the Law of April 6, 1830 have on Texas?
 - a. Strengthened relations with Mexico
 - b. Encouraged diplomatic relations with Great Britain
 - c. Led to stronger religious rules
 - d. Angered Texans because they feared it would hurt their economy

3. Why was Stephen F. Austin arrested in January of 1834?
 - a. He organized a military force to oppose Mexico
 - b. He expressed displeasure at not being invited to dine with the King of Spain
 - c. He wrote a letter telling Texas leaders to organize a state government before they received permission
 - d. He struck a Mexican official



4. Where was this flag attached to a cannon that was demanded by Mexican forces?
 - a. Gonzales
 - b. Victoria
 - c. Brownsville
 - d. San Antonio

5. Why did James Bowie decide to defend the Alamo?
- Crops were flourishing and would provide enough food for all its inhabitants
 - Not enough time to retreat to Nacogdoches
 - Decided the Alamo and its artillery were too important to destroy
 - Wanted to look for wealth that was rumored to be in the area
6. Who, according to legend, took a sword and drew a line on the ground at the Alamo?
- Henry Karnes
 - William B. Travis
 - Almaron Dickinson
 - Francis Johnson
7. How long did the Battle of San Jacinto last?
- 18 minutes
 - One hour
 - 30 minutes
 - One day
8. Who was this early Texas political leader?
- **Served as a Mexican congressman and governor**
 - **Received a land grant to settle 500 families in East Texas**
 - **Elected ad interim vice president**
- Benito Martinez
 - Domingo Ramon
 - Jose Antonio Navarro
 - Lorenzo de Zavala
9. _____ left the Alamo to request help from Col. James Fannin at Goliad.
- Juan Seguin
 - Martin de Leon
 - Ben Milam
 - William Goyens
10. What created a new government for the Republic of Texas?
- Consultation of 1835
 - Constitution of 1836
 - Mayflower Compact
 - Turtle Bayou Resolutions
11. A court system was formed for the Republic of Texas with _____ appointed as the first chief justice.
- John Marshall
 - Albert Sydney Johnston
 - James Collinworth
 - Henry Smith
12. Why was the principle of checks and balances applied in the constitution for the Republic of Texas?
- To prevent abuse
 - Protect individual rights
 - People have a voice in their government by voting
 - To make sure that the branches work together fairly

13. Who contributes the most financial support to Texas public schools?
- Church
 - Lottery
 - State and local governments
 - Local businesses
14. What is the basic function of the Texas Board of Education?
- Collects taxes and fees
 - Sets education policy and reviews textbooks for use in schools
 - Hires superintendents
 - Puts education policy into effect
15. Why is civic participation important in a republic?
- Provides conflict for the government
 - Denies rights to its citizens
 - Makes contributions to the Church
 - Representative democracies depend on citizens who vote, pay taxes and provide public services
16. _____, the first Hispanic elected to statewide office, was elected to the Texas Supreme Court in 1986.
- Raul Gonzales
 - Pedro Menedez de Aviles
 - Mariano Arista
 - Hernan Gallegos
17. What title replaces the question mark?

?

General in Chief of the Army of Operations President of the Republic of Mexico

- Jose Urrea
 - Antonio Lopez de Santa Anna
 - Simon Herrera
 - Pedro Delgado
18. Where were Mexican troops required to withdraw beyond according to the Treaty of Velasco?
- Davis Mountains
 - Sabine River
 - Rio Grande del Norte
 - Colorado River
19. Texas troops were not to come within _____ of Mexican troops.
- 5 leagues
 - One league
 - 10 leagues
 - One mile
20. When was the Constitution of 1836 adopted?
- 1 o'clock
 - 6 o'clock
 - 10 o'clock
 - 12 o'clock

21. How was a loan of \$1,000,000 authorized by the Convention of 1836 to be repaid?
- | | |
|-----------------------------|--------------------------------------|
| a. Collection from citizens | c. Taxes on goods from United States |
| b. By Santa Anna | d. Proceeds of public land |
22. Where did the new executives go following the adjournment of the Convention of 1836?
- | | |
|---------------|-----------|
| a. Galveston | c. Goliad |
| b. Harrisburg | d. Dallas |
23. Why did the Texas colonists take up arms against the Mexican government?
- In defense of the national constitution
 - Quarrels over water rights
 - Encourage military alliances
 - To be allowed to join the United States
24. Who was the President of the Convention of 1836?
- | | |
|---------------------|--------------------|
| a. Collin McKinney | c. Richard Ellis |
| b. George Childress | d. Bailey Hardeman |
25. How did the colonists refer to these laws passed by the British Parliament?
- **Closed the port of Boston until colonists paid for the destroyed tea**
 - **Banned committees of correspondence**
 - **Let British officials accused of crimes in the colonies stand trial in Britain**
- | | |
|---------------------|--------------------|
| a. Stamp Act | c. Declaratory Act |
| b. Intolerable Acts | d. Townshend Acts |
26. What is the best definition for mercantilism?
- An economic system in which nations increase their wealth and power by obtaining gold and silver and by establishing a favorable balance of trade
 - The belief that a nation needs a large military force
 - A feeling of pride, loyalty and protectiveness toward one's country
 - A political system in which the King allows nobles the use of his land in exchange for their military service and their protection of people living on the land
27. This passage is based on the philosophy of _____.
- “We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness.” Declaration of Independence***
- | | |
|-------------|---------------|
| a. Voltaire | c. John Locke |
| b. Socrates | d. Pluto |

1775
Lexington

1777
?

1781
Yorktown

28. What turning point battle in the Revolutionary War finishes the timeline?
- a. Valley Forge
 - b. Kaskaskia
 - c. Savannah
 - d. Saratoga
29. Who was elected town messenger for the committee of safety that gave him safe passage through battle lines to carry news to and from the Provincial Committee at Exeter?
- a. Johnny Tremain
 - b. Wentworth Cheswell
 - c. Elbridge Gerry
 - d. James Otis
30. Which position completes the chart about George Washington?
- **Chosen as the commanding general of the Continental Army**
 - **?**
 - **First President of the United States**
- a. Author of the Declaration of Independence
 - b. Wrote Common Sense
 - c. Created the Albany Plan of Union
 - d. President of the Constitutional Convention
31. What document guaranteed the rights that English colonists expected from living under an English government?
- a. Mayflower Compact
 - b. Open Door Policy
 - c. Magna Carta
 - d. Platt Amendment
32. Why did the Pilgrims feel they needed an agreement for the sake of order?
- a. Because they landed outside the limits of the Virginia Company, their charter did not apply
 - b. Trip had taken so long their charter was no longer valid
 - c. Numerous conflicts on the voyage from England
 - d. Leader of the group died before reaching Plymouth
33. How does the Constitution deal with the complaint that the King refused to allow colonial legislatures to meet regularly?
- a. Article 1, Section 5 specified that meetings were to be held at the discretion of the President
 - b. Article 1, Section 4 specified that meetings were to be held every year
 - c. Article 1, Section 3 made it mandatory to meet every month
 - d. Article 1, Section 6 did not specify how often meetings were to be held

34. What is NOT a benefit of the free enterprise system?
- Gives consumers certain rights
 - Encourages inventors
 - All members of society are equal partners in the profits
 - Individuals can become entrepreneurs
35. Where is the home of the world's first democratic constitution?
- Egypt
 - Persia
 - Constantinople
 - Athens
36. _____ is a form of limited government.
- Democracy
 - Absolute monarchy
 - Dictatorship
 - Theocracy
37. What is the best definition for unlimited government?
- Government in which leaders rule without any restrictions
 - Type of government where, through law, some control is placed on leadership's role
 - Percentage of people who can read and write
 - Unwritten set of laws based on local custom
38. Which country has a communist economy?
- Canada
 - North Korea
 - Germany
 - France
39. Socialism is _____.
- Economy driven by forces including competition, supply and demand
 - Economic, social and political system based on the teachings of Karl Marx, which advocated the elimination of private property
 - Form of government in which the king or queen governs with complete power
 - Economic system in which many businesses are owned and run by the government
40. What is a benefit of the free enterprise system?
- Electric companies are heavily regulated
 - Government runs the factories and farms
 - Individuals are free to labor in whatever job they want
 - The country is behind other countries in technology and manufactures goods of poor quality

**UNIVERSITY INTERSCHOLASTIC LEAGUE
2022-23 A+ SOCIAL STUDIES
INVITATIONAL TEST —GRADES 7 & 8**

Answer Key

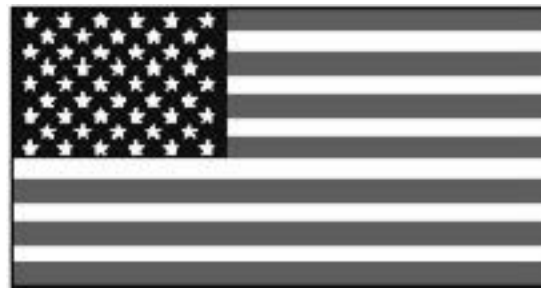
- | | |
|-------|-------|
| 1. B | 21. D |
| 2. D | 22. B |
| 3. C | 23. A |
| 4. A | 24. C |
| 5. C | 25. B |
| 6. B | 26. A |
| 7. A | 27. C |
| 8. D | 28. D |
| 9. A | 29. B |
| 10. B | 30. D |
| 11. C | 31. C |
| 12. D | 32. A |
| 13. C | 33. B |
| 14. B | 34. C |
| 15. D | 35. D |
| 16. A | 36. A |
| 17. B | 37. A |
| 18. C | 38. B |
| 19. A | 39. D |
| 20. D | 40. C |

FALL/WINTER DISTRICT 2022-2023

A+ ACADEMICS



University Interscholastic League

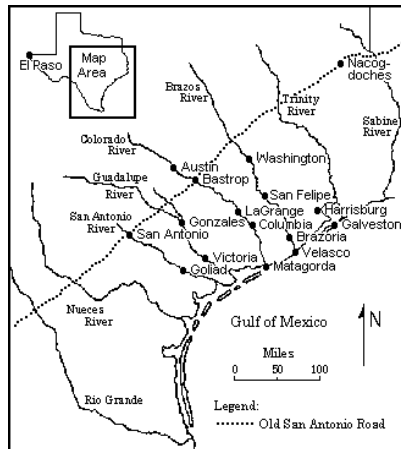


Social Studies

grades 7 & 8

**DO NOT OPEN TEST
UNTIL TOLD TO DO SO**

**UNIVERSITY INTERSCHOLASTIC LEAGUE
2022-23 A+ SOCIAL STUDIES
FALL/WINTER TEST – GRADES 7-8**



1. Where was the Republic of Fredonia?
 - a. San Antonio
 - b. Nacogdoches
 - c. Galveston
 - d. Jefferson

2. What document explained the actions taken by Texans at Anahuac on June 13, 1832?
 - a. Dawes General Allotment Act
 - b. Ashworth Act
 - c. Plan de San Diego
 - d. Turtle Bayou Resolutions

3. How did the Mexican government respond to Mier y Teran's report?
 - a. Passed the Law of April 6, 1830
 - b. Enacted a civil rights bill
 - c. Constructed foreign trade zones
 - d. Called for a special election



4. Where was the brief battle over this cannon that began the Texas Revolution?
 - a. San Antonio
 - b. Bastrop
 - c. Gonzales
 - d. San Felipe de Austin

5. Who wrote these words ***“To the People of Texas and All Americans in the World”***?

“I am besieged by a thousand or more of the Mexicans under Santa Anna-I have sustained a continual Bombardment & cannonade for 24 hours & have not lost a man-The enemy has demanded a surrender at discretion, otherwise, the garrison are to be put to the sword,”

- a. William B. Travis
- b. James Butler Bonham
- c. David Crockett
- d. Juan Seguin

6. At which meeting did Texans declare their independence from Mexico?

- a. Convention of 1845
- b. Constitutional Convention
- c. Convention of 1836
- d. Albany Plan of Union

7. Why were Fannin’s troops forced to surrender at Goliad?

- a. Texan reinforcements arrived
- b. Additional weapons were obtained by Texas
- c. Supplies arrived for the Texans
- d. Heavy fog enabled Mexican troops to surround them on the open prairie where they had no cover and limited water

8. Who was this military and political leader of Texas?

- **Elected commander in chief of the regular army by the Consultation of 1835**
- **First President of the Republic of Texas**
- **Governor of Texas**

- a. Sidney Sherman
- b. Sam Houston
- c. Mirabeau Lamar
- d. Henry Karnes

9. _____ was the leader of a Tejano group that took part in the Battle of San Jacinto.

- a. Erasmo Seguin
- b. Martin de Leon
- c. Juan Seguin
- d. Pedro de Alvarado

10. What group was organized in the 1830s to protect settlers in Texas?

- a. Texas Rangers
- b. Davis Guards
- c. Sons of Liberty
- d. Old Three Hundred

11. Who was the first secretary of state of the Republic of Texas that only served a few months before his death?

- a. Henry Smith
- b. James Collinworth
- c. Thomas J. Rusk
- d. Stephen F. Austin

12. How was the principle of limited government applied in the new Constitution of the Republic of Texas?

- a. Division of basic government roles into branches
- b. The powers of each branch were limited to only those listed in the document
- c. Guarantees certain personal liberties and privileges
- d. Government in which people rule

13. What is the Permanent School Fund?
- Fund receives money from state taxes and investments
 - Puts education policy into effect
 - Sets education policy
 - Certificates that represent money owed by a government to private citizens
14. How do schools pay for special construction projects such as the construction of new buildings?
- License fees
 - Motor fuels tax
 - Franchise taxes
 - Bonds
15. What is one of the most important civic responsibilities?
- Take care of yourself
 - Voting
 - Helping your family
 - Behaving in a respectful way
16. Which position finishes the list of offices in which James Baker III served?
- **White House Chief of Staff**
 - ?
 - **Secretary of State**
- Secretary of Defense
 - Press Secretary
 - Secretary of Treasury
 - Attorney General
17. According to the Treaty of Velasco, where was Santa Anna to be taken ***“for the purpose of effecting his solemn engagements”***?
- Austin
 - Mexico City
 - Houston
 - Vera Cruz
18. When was the Treaty of Velasco signed?
- April 15, 1836
 - May 14, 1836
 - March 4, 1835
 - September 5, 1836
19. How were Texas property owners to be compensated for property taken by the retreating Mexican army?
- Army is to remit an account of the value of the property consumed, the place taken, and the name of the property owner to the Commander in Chief of the Army of Texas or appointed Commissioners
 - Property owners were to submit a request to be paid by the Mexican government
 - Army leaves vouchers for owners to submit to the government
 - Owners were not to receive compensation
20. According to Col. Gray’s diary, who introduced a series of resolutions to the Convention giving large land bounties to the volunteers?
- Kimble
 - McKinney
 - Conrad
 - Collinsworth
21. Where did a report, spread by a person passing through the town, state the position of the enemy’s cavalry?
- Passing the Colorado at Bastrop
 - Along the Rio Grande
 - Within 10 miles of the Convention
 - At Nacogdoches

22. What is the definition of *sine die*?

“Soon after the passage of the resolution on the loan, the Convention adjourned, sine die, without any vote of thanks to the President.”

- a. Every year
- b. Never to meet again
- c. For an indefinite period
- d. Only if asked by the President

23. Where was the meeting of the Delegates of the People of Texas in General Convention in 1836?

- a. Waterloo
- b. Washington
- c. Nacogdoches
- d. San Antonio

24. When did the Delegates of the People of Texas in General Convention meet?

- a. April 21, 1836
- b. May 5, 1836
- c. September 5, 1836
- d. March 2, 1836

25. Why did Great Britain change their policy toward the colonists after the French and Indian War?

- a. Britain wanted the colonies natural resources
- b. Mexico impressed colonists as sailors
- c. Britain wanted to govern its 13 original colonies and the territory gained in the war in a uniform way
- d. Britain received large sums of money from Germany after the French and Indian War

26. The core idea of the Declaration of Independence is based on the philosophy of _____.

- a. John Locke
- b. Socrates
- c. Voltaire
- d. Pluto

April 19, 1775	October, 1777	Winter of 1777-78	October, 1781
Lexington	Saratoga	?	Yorktown

27. What battle that came to stand for the great hardships that Americans endured in the Revolutionary War finishes the timeline?

- a. Trenton
- b. Valley Forge
- c. Princeton
- d. New Orleans

28. Which treaty ended the Revolutionary War, confirming the independence of the United States and setting the boundaries of the new nation?

- a. Treaty of Guadalupe Hidalgo
- b. Treaty of Ghent
- c. Treaty of Tordesillas
- d. Treaty of Paris 1783

38. What type of an economy do individuals determine for themselves what to produce, who will want it, how much to produce and how much to charge?
- a. Traditional
 - b. Market
 - c. Command
 - d. Mixed
39. Which country is the best example of a socialist economy?
- a. Canada
 - b. Brazil
 - c. Myanmar
 - d. Germany
40. What is a benefit for workers in the free enterprise system?
- a. Government decides what crops they will grow
 - b. Workers do the same work for generations
 - c. Government regulates the prices charged for goods
 - d. Workers are free to work in whatever jobs they want and for whatever employers they want

**UNIVERSITY INTERSCHOLASTIC LEAGUE
2022-23 A+ SOCIAL STUDIES
FALL/WINTER TEST —GRADES 7 & 8**

Answer Key

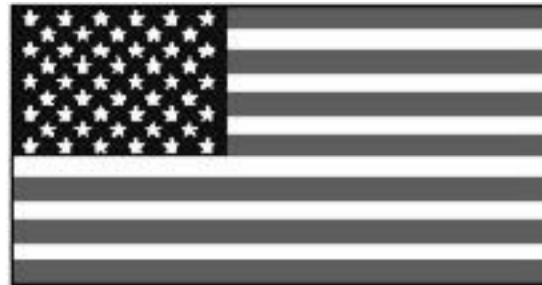
- | | |
|-------|-------|
| 1. B | 21. A |
| 2. D | 22. C |
| 3. A | 23. B |
| 4. C | 24. D |
| 5. A | 25. C |
| 6. C | 26. A |
| 7. D | 27. B |
| 8. B | 28. D |
| 9. C | 29. B |
| 10. A | 30. D |
| 11. D | 31. A |
| 12. B | 32. C |
| 13. A | 33. D |
| 14. D | 34. A |
| 15. B | 35. C |
| 16. C | 36. B |
| 17. D | 37. A |
| 18. B | 38. B |
| 19. A | 39. C |
| 20. C | 40. D |

SPRING DISTRICT 2022-2023

A+ ACADEMICS



University Interscholastic League



Social Studies

grades 7 & 8

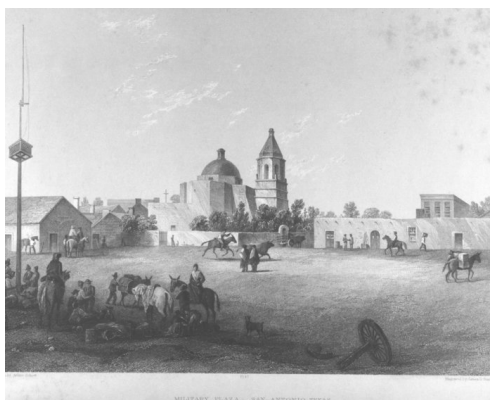
**DO NOT OPEN TEST
UNTIL TOLD TO DO SO**

**UNIVERSITY INTERSCHOLASTIC LEAGUE
2022-23 A+ SOCIAL STUDIES
SPRING DISTRICT TEST – GRADES 7-8**

1. What revolt, led by Texas colonist Benjamin Edwards, began in 1826 after conflict with the Mexican government ended in the cancellation of his colony's contract?
 - a. Council House Fight
 - b. Fredonian Rebellion
 - c. Grass Fight
 - d. March to the Sea

2. Which recommendation from Mier y Teran finishes the list?
 - **Trade with Mexico and Texas should be increased**
 - **?**
 - **Mexico should encourage more Europeans and Mexicans to settle in Texas**
 - a. More trade treaties should be made with the United States
 - b. Decrease the production of cotton
 - c. Increase exploration of oil in Texas
 - d. More soldiers needed to be sent to Texas to increase Mexican control

3. Stephen F. Austin was arrested in _____ while returning to Texas after an important visit with government officials in Mexico City.
 - a. Saltillo
 - b. San Antonio
 - c. Laredo
 - d. Galveston



4. Where did Santa Anna raise the red flag of no quarter at the Battle of the Alamo?
 - a. San Francisco de los Tejas
 - b. La Bahia
 - c. San Fernando Cathedral
 - d. Santa Cruz de San Saba

5. Who chaired the committee in charge of drafting the document declaring Texas independence?
 - a. George Childress
 - b. Robert Potter
 - c. Jose Antonio Navarro
 - d. Samuel Carson



6. Where is this monument a reminder of the Texas victory in the last battle of the Texas Revolution?
- a. Sabine Pass
 - b. Coleto Creek battlefield
 - c. San Jacinto battlefield
 - d. Palo Duro Canyon
7. Who was this military and political leader?
- **Commanded a unit at the Battle of San Jacinto**
 - **Leader of scouts at the Battle of the Alamo**
 - **Mayor of San Antonio**
- a. Placido Benavides
 - b. Juan Seguin
 - c. Edward Burleson
 - d. Martin de Leon
8. What Texas military leader fought at the Battle of Gonzales, commanded forces in the Battle of Concepcion and was in charge of troops at Goliad that surrendered to General Urrea and were later executed by order of Santa Anna?
- a. James Bowie
 - b. Almaron Dickinson
 - c. Ben Milam
 - d. James Fannin
9. Who became part of a rebel group that opposed the Law of April 6, 1830 and was arrested by Juan Davis Bradburn at Anahuac?
- a. John Austin
 - b. William B. Travis
 - c. Asa Hill
 - d. James Butler Bonham
10. What was one of the first actions of Houston and the Texas Congress in the new Republic?
- a. Rio Grande was set as the border to the south and west
 - b. Red River was set as the northern border
 - c. Sabine River was set as the eastern border
 - d. San Antonio River was set as the southern border
11. Which city served as a capital of the Republic of Texas?
- a. Nacogdoches
 - b. Dallas
 - c. Fort Worth
 - d. Houston

12. One of the two questions that had been on the Republic of Texas election ballot asked if voters favored annexation by the United States. What is annexation?
- The large-scale farming and processing of crops
 - Dealings between a country and other countries
 - Formal joining of one political region to another
 - A tax on voting
13. How did the Constitution for the Republic of Texas establish a republican government?
- System of government in which power is divided between a central government and smaller political units
 - Division of basic government roles into branches
 - Restricts the power of the government
 - Representatives and executive officials were elected by the people
14. What type of taxes contribute heavily to school funding in Texas?
- Local property taxes
 - Investments
 - Franchise taxes
 - License fees
15. Who reviews standards for learning materials, schools, and teacher certification?
- Education Planning Board
 - Office of Budget and Planning
 - Texas Education Agency
 - Commissioners Court
16. Which Texas political leader served as Vice President of the United States from 1933-1941 after previously serving as Speaker of the House of Representatives?
- James Allred
 - John Nance Garner
 - W. Lee O'Daniel
 - Pat Neff
17. Why did the Delegates of the People of Texas in General Convention feel it was important to meet?
- Unsuccessful business deal with the British
 - Oppression by the Mexican government
 - Alliance with France
 - Increased population growth
18. What did the Mexican government promise the Anglo-American people that colonized Texas?
- A league of land for each colonist
 - 100 cows for each colonist
 - A railroad system
 - A written constitution
19. Who arrived at the Convention of 1836 and brought news that an attack had been made on the Alamo?
- Mr. Lacy
 - Mr. West
 - Mr. Ainsworth
 - Mr. Rusk
20. How did the Convention of 1836 modify the land question from its first introduction?
- To set aside the location of 11 league grants within 20 miles of the United States line
 - Three large grants
 - 40 acres
 - 10 leagues along the Rio Grande River

21. Where did delegates of the Convention of 1836 contract with its Commissioners for a million dollar loan?
- a. New Orleans
 - b. Atlanta
 - c. Savannah
 - d. New York
22. How was the duplicate copy of the Secret Treaty of Velasco to be restored to Santa Anna?
- a. To be held by the Texas government until Santa Anna reached Mexico City
 - b. Immediately
 - c. To remain folded and sealed until negotiations had been concluded
 - d. Santa Anna was never to receive a copy
23. Who signed the Secret Treaty of Velasco for Texas?
- a. Sam Houston
 - b. Henry Smith
 - c. Anson Jones
 - d. David G. Burnet
24. According to the Treaty of Velasco, when were hostilities between the Mexican and Texan troops to cease?
- a. 30 days
 - b. Immediately
 - c. After Santa Anna arrived in Vera Cruz
 - d. When negotiations concluded
25. What was the Proclamation of 1763?
- a. A law that distributed reservation land to individual owners
 - b. An act that stated that American ships were no longer allowed to sail to foreign ports, and it also closed American ports to British ships
 - c. An order in which Britain prohibited its American colonists from settling west of the Appalachian Mountains
 - d. A law that established a plan for surveying and selling the federally owned lands west of the Appalachian Mountains
26. Why did colonial leaders claim that Parliament had no right to tax the colonies?
- a. Colonists were subjects of the United States and enjoyed the protection of their laws
 - b. Colonial leaders declared the right to govern without interference from Britain
 - c. Colonists had claims from France
 - d. Since colonists were not represented in Parliament
27. Who was first to sign the Declaration of Independence?
- a. John Trumbull
 - b. John Hancock
 - c. Richard Henry Lee
 - d. Benjamin Franklin
28. How did delegates structure the new national government under the Articles of Confederation?
- a. It gave few powers to the national government
 - b. Three equal branches of government
 - c. Powerful executive branch
 - d. Left no powers to the States

April 19, 1775
Lexington

October, 1777
Saratoga

Winter of 1777-1778
Valley Forge

October, 1781
?

29. Where did Cornwallis surrender his forces that finishes this timeline?

- a. Charlestown
- b. Trenton
- c. Yorktown
- d. Princeton

30. What title outlines these conditions that ended the American Revolution?

?

- 1. **United States was independent**
- 2. **Its boundaries would be the Mississippi River on the west, Canada on the north and Spanish Florida on the south**
- 3. **The United States would receive the right to fish off Canada's Atlantic Coast, Newfoundland and Nova Scotia**
- 4. **Each side would repay debts it owed the other**
- 5. **The British would return any enslaved persons they had captured**
- 6. **Congress would recommend that the states return any property they had seized from Loyalists**

- a. Treaty of Greenville
- b. Treaty of Versailles
- c. Treaty of Ghent
- d. Treaty of Paris 1783

31. _____ was an early advocate of women's rights and one of the great letter writers in history.

- a. Molly Pitcher
- b. Abigail Adams
- c. Marie Curie
- d. Clara Barton

32. Who delivered these words in a famous speech before the Virginia House of Burgesses in March 1775?

"I know not what course others may take. But as for me, give me liberty or give me death."

- a. Patrick Henry
- b. William Wordsworth
- c. Nathan Hale
- d. Robert Livingston

33. What were the Federalist Papers?

- a. A series of essays defending and explaining the Constitution
- b. Pamphlet that helped convince many Americans that a complete break with Britain was necessary
- c. Government document giving an inventor the exclusive right to make or sell his or her invention for a specific number of years
- d. Movement that emphasized the use of reason and scientific method to obtain knowledge

34. Who wrote the Federalist Papers?

- a. George Mason, Roger Sherman and Oliver Ellsworth
- b. Thomas Paine
- c. John Peter Zenger
- d. James Madison, Alexander Hamilton and John Jay

35. How does the Constitution deal with the colonial grievance of quartering troops?
- a. First Amendment
 - b. Third Amendment
 - c. Fourth Amendment
 - d. Fifth Amendment
36. Who outlined his ideas of free enterprise in his book *The Wealth of Nations*, first published in 1776?
- a. Stephen Decatur
 - b. Jay Gould
 - c. Adam Smith
 - d. Henry Cabot Lodge
37. Which European country did Americans use as a basis for their laws and government?
- a. Germany
 - b. Spain
 - c. Great Britain
 - d. Switzerland
38. What was the foundation of Roman law?
- a. Mayflower Compact
 - b. Magna Carta
 - c. English Bill of Rights
 - d. Twelve Tables
39. A constitutional government is _____.
- a. A form of government in which the king or queen governs with complete power
 - b. Defined by the existence of a legal instrument or merely a set of fixed norms or principles
 - c. All-powerful government leader
 - d. A medieval workers' organization
40. What system is sometimes called a "free enterprise system"?
- a. Market economy
 - b. Command economy
 - c. Traditional economy
 - d. Mixed economy

**UNIVERSITY INTERSCHOLASTIC LEAGUE
2022-23 A+ SOCIAL STUDIES
SPRING DISTRICT TEST —GRADES 7 & 8**

Answer Key

- | | |
|-------|-------|
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| 16. B | 36. C |
| 17. B | 37. C |
| 18. D | 38. D |
| 19. C | 39. B |
| 20. A | 40. A |