



A+ Science Overview

A+ Science
Contest Overview
Capital Conference 2024

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Presenter

About Me

- Teach at Robinson High School
- Subjects Taught: Physics, Physics Honors, Principles of Technology, Biology, Chemistry, and IPC
- Currently Calculator Applications & Science UIL Coach
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A+ Science:

- The Science test is written for students in grades 6-8.
- Do sixth, seventh, and eighth graders take the same test? Yes.
 - Beginning 2021-22, the test created for Science will be written for students in sixth, seventh, and eighth graders. A student could participate in Science as a sixth grader, seventh grader, and eighth grader potentially.

General Information

- Emphasis for the Science contest will be placed on knowledge of scientific fact, understanding of scientific principles and the ability to think through scientific problems.
- The contest was designed to test not only memory but the ability to critically think about science and scientific processes and concepts. The contest will build upon the vast body of changing and increasing knowledge described by physical, mathematical, and conceptual models.

NATURE OF THE CONTEST:

- *Contest Format.* 50 objective questions
- *Time Allotted for Contest.* 45-minute contest.
- Such concepts include, but are not limited to: matter and energy, equilibrium, force and motion, physical and chemical properties, the relationship between organisms and the environment, the components of our solar system, the composition of matter and genetics. The contests will build upon the vast body of changing and increasing knowledge described by physical, mathematical and conceptual models.

UIL Constitution & Contest Rules

■ REPRESENTATION:

- *Contestants.* Students in officially prescribed grade levels below 9th grade who are eligible under Section 1400 or 1405 may enter each division of this contest only one time.
- *Divisions.* Districts shall offer either a separate division for each participating grade level or combined grade level division as specified in contest procedures.

- REPRESENTATION CONTINUED:

- *Individual Competition.* Up to 3 contestants in the district meet.
- *Team Competition.* The combined scores of the 3 contestants in each division from a school shall constitute the school's team score. Must have 3 contestants to compete to participate in the team competition.

Graders

- At least three graders should be familiar with the instructions for grading and the contest rules.
- The contest director may recruit more than three graders.

- *Scoring.* Exclude contestants from the room when grading. Allow sufficient time for careful grading, and do not sacrifice accuracy for speed. Each test should be independently scored twice, and papers contending to place should be scored a third time.
 - Correct answers, add five points.
 - Incorrect answers, subtract two points.
 - No deduction has been taken for skipped or unanswered items.
- *Points.*
 - Individual points are awarded through 6th place.
 - Team points will be awarded through 3rd place.
 - No ties are to be broken. Should there be a tie for second place, there is no third place.

A+ Academics Resources

<https://www.uiltexas.org/aplus/resources>

▪ Hexco, Inc.

- PO Box 199, Hunt, TX
78024-0199
- 800-391-2891 or 830-367-3825; Fax: 830-367-3824
- Email: hexco@hexco.com
- Website: www.hexco.com
- Supplies packages for
Science I & II.

▪ The Virtual Challenge Meets

- 940-782-9898
- Email:
virtualchallengemeets@gmail.com
cthompson1313@gmail.com
- Website:
<https://virtualchallengemeets.com/>
- Offers a statewide testing
program.

This is a list of independent companies who advertise preparatory materials for UIL elementary and junior high academic contests. The University Interscholastic League is not affiliated with any of the companies and cannot be responsible for any of their products or services.

Weight of Test

- 6th Grade TEKS – 15 Questions
- 7th Grade TEKS – 15 Questions
- 8th Grade TEKS – 15 Questions
- High School Science – 5 Questions
 - 1 Biology
 - 1 Chemistry
 - 1 Physics
 - 2 SEP's

Content Level

- Weight of tests is based on TEKS
 - All questions written based on the TEKS
- Emphasizes correct application of science skills
 - Higher level questioning

Various Coaching Hints

- Develop a timeline. Check your school calendar for conflicts.
- When selecting your team, don't forget alternates.
- Determine times to meet or practice as a team.
- Encourage members to practice on their own or using a “study buddy” or online resources.
- Provide study outline for students: Break content down into smaller sections using the TEKS.
- Make studying additional resources available to student.
- Try integrating technology.
- Have mock test. Explain scoring and procedures to students.
- Network with other sponsors to get ideas.
- Incorporate Anchoring Phenomena into class.

Useful Websites

- <https://www.esc4.net/science/product-resources> - TEKS side by side
- <https://tea.texas.gov/academics/tea-science-teks-posters-85x11.pdf>
- <https://tea.texas.gov/academics/220320-teabrief-recurring-themes-and-concepts-5-11-23.pdf>
- <https://www.ngssphenomena.com/ourvoice/2020/2/19/phenomenainfocus-anchoringphenomenon> - What is anchoring phenomenon?
- <https://sites.google.com/view/modelbasedinquiry/phenomena-ideas>
- <https://www.remind.com/> - Way to contact your team
- <http://lead4ward.com/resources/> - Resources for STARR
- <http://www.gpb.org/chemistry-physics> - Videos for Chem & Physics
- <http://www.brightstorm.com/science/> - Material for Bio, Chem, & Physics
- <http://www.classtools.net/> - Various resources, QR Code Generator
- <http://jeopardylabs.com/> - Online Jeopardy Games
- <http://www.exploratorium.edu/> - Activities and Lesson
- <http://phet.colorado.edu/> - Online Simulations

Fall Student Activities Conferences

- Sept 7 - Tyler Junior College, Tyler
- Sept 14 - Lone Star College-North Harris, Houston
 - Oct 5 - Texas Tech University, Lubbock
 - Nov 2 - University of Texas at Austin