

Week 1: Learning Research Skills

LESSON 1: OVERVIEW OF THE SOLAR SYSTEM
GRADE LEVEL: 6-8
LENGTH: 2 DAYS

TEKS/SEs:

Science

Grade 6

6.2.A 6.2.E 6.4.A 6.11.A

Grade 7

7.2.A 7.2.E 7.3.B 7.3.C 7.4.A

Grade 8

8.2.A 8.2.E 8.3.B 8.3.C 8.4.A

Full text versions of these TEKS are available at <http://ritter.tea.state.tx.us/rules/tac/chapter112/ch112b.html>

Math

Grade 6

6.2.C 6.3.A 6.3.C 6.11.A 6.11.B 6.11.D

Grade 7

7.2.C 7.2.E 7.2.F 7.2.G 7.4.A 7.13.A

Grade 8

8.1.D 8.3.A 8.14.A 8.14.B 8.14.D

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Language Arts

Grade 6

6.2.A

Grade 7

7.2.A

Grade 8

8.2.A

Full text versions of these TEKS are available at <http://ritter.tea.state.tx.us/rules/tac/chapter110/ch110b.html>

NATIONAL STANDARDS

Science

Unifying Concepts and Processes

- Change, constancy, and measurement

Science as Inquiry

- Abilities necessary to do scientific inquiry
- Understandings about scientific inquiry

Physical Science

- Motions and forces

Earth and Space Science

- Structure of the earth system
- Earth's history
- Earth in the solar system

History and Nature of Science

- Science as a human endeavor
- Nature of science
- History of science

Math

Numbers and Operations

- Understand numbers, ways of representing numbers, relationships among numbers, and number systems
- Understand meanings of operations and how they relate to one another

Algebra

- Use mathematical models to represent and understand quantitative relationships

Measurement

- Understand measurable attributes of objects and the units, systems, and processes of measurement
- Apply appropriate techniques, tools, and formulas to determine measurements

Data Analysis

- Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them

Problem Solving

- Build new mathematical knowledge through problem solving
- Solve problems that arise in mathematics and in other contexts
- Apply and adapt a variety of appropriate strategies to solve problems
- Monitor and reflect on the process of mathematical problem solving

Communication

- Organize and consolidate their mathematical thinking through communication
- Communicate their mathematical thinking coherently and clearly to peers, teachers, and others
- Analyze and evaluate the mathematical thinking and strategies of others;
- Use the language of mathematics to express mathematical ideas precisely.

Connections

- Recognize and apply mathematics in contexts outside of mathematics

Representation

- Create and use representations to organize, record, and communicate mathematical ideas
- Select, apply, and translate among mathematical representations to solve problems
- Use representations to model and interpret physical, social, and mathematical phenomena

Language Arts

- NL-ENG.-K-12.4 COMMUNICATION SKILLS Students adjust their use of spoken, written, and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes.
- NL-ENG.K-12.12 APPLYING LANGUAGE SKILLS Students use spoken, written, and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion, and the exchange of information).