

## TRANSFER GOALS: K-12 CSISD science students will be able to independently use their learning to:

1. Become informed, critical users of science
2. Craft and communicate evidence-based observations, analysis, and conclusions.
3. Design and conduct investigations in order to generate reliable knowledge.
4. Analyze interactions within natural, designed, and interconnected systems.

## THREE-DIMENSIONAL TEKS [\[explanation\]](#)

SCIENCE & ENGINEERING PRACTICES Through each unit, students will practice and develop the following scientific skills:	RECURRING THEMES & CONCEPTS Through each unit, students will apply the following overarching themes across topics:	CONTENT Students will practice skills and apply recurring themes in these topics:
<ul style="list-style-type: none"> <li>Asking questions and defining problems (1.1A)</li> <li>Developing and using models (1.1G, 1.2A, 1.3A)</li> <li>Planning and carrying out investigations (1.1B, 1.1C, 1.1D, 1.1E)</li> <li>Analyzing and interpreting data (1.1F, 1.2B)</li> <li>Using mathematics and computational thinking (1.2C)</li> <li>Constructing explanations and designing solutions (1.3A, 1.4A, 1.4B)</li> <li>Engaging in argument from evidence (1.3B, 1.3C, 1.4A, 1.4B)</li> <li>Obtaining, evaluating, and communicating information (1.2D, 1.3B, 1.3C, 1.4A, 1.4B)</li> </ul>	<ul style="list-style-type: none"> <li>Patterns in nature (1.5A)</li> <li>Cause and effect (1.5B)</li> <li>Scale, proportion, and quantity (1.5C)</li> <li>Systems and system models (1.5D)</li> <li>Flow of energy and cycling of matter (1.5E)</li> <li>Structure and function (1.5F)</li> <li>Stability and change (1.5G)</li> </ul>	<ul style="list-style-type: none"> <li>Matter and Properties (Unit 2)</li> <li>Force, Motion, and Energy (Units 3- 4)</li> <li>Earth and Space (Units 5 - 7)</li> <li>Organisms and Environments (Units 8 - 10)</li> </ul>

## LEARNING PROGRESSION

- **Unit 1 What is Science?** Students will explore the contributions of scientists and how their research and innovations have shaped society. They will recognize the ongoing importance of scientific inquiry in solving real-world problems and improving lives.
- **Unit 2 Matter & Properties.** The students learn that objects have various physical properties that determine how they are described and classified. They will understand how a whole object is a system made of organized parts.
- **Unit 3 Changes in Matter Caused by Heat.** The students explain and predict changes in materials caused by heating or cooling. They will also investigate and describe applications of heat in everyday life and how some changes caused by heat may or may not be reversed, such as cooking food or melting butter.
- **Unit 4 Force & Motion.** The students will understand that different forces can change the speed or direction of an object's motion by planning and conducting investigations.
- **Unit 5 Weather & Seasons.** Students will explore and identify patterns within the characteristics of weather and the observable changes of seasons.
- **Unit 6 Rocks, Soil & Water.** Students will investigate the properties of different soils and describe how water can move rock and soil from one place to another. They will also identify and describe how plants, animals, and humans use rocks and soil.
- **Unit 7 Water & Conservation.** Students will compare different bodies of water by their properties, such as color, clarity, size, and whether they contain freshwater or saltwater. They will also explore how living things use water, why conserving it is important, and ways to protect natural water sources.
- **Unit 8 Animal Structures.** Students will identify the external structures of different animals and learn how these features help them survive, move, and meet their basic needs. They will compare how various animals use their body parts in different ways to live in their environments.
- **Unit 9 Animal Life Cycles.** Students will observe and describe the basic life cycles of animals such as birds, mammals, and fish. They will also compare how young animals resemble their parents in appearance and behavior.
- **Unit 10 Living & Nonliving Interactions & Dependency.** Students will classify living and nonliving things by their basic needs and ability to produce young, while exploring how living organisms interact with and depend on their environment. They will focus on understanding food chains and illustrating how energy moves between plants, animals, and other living things.

## 25-26 PACING OVERVIEW\*\*

1st Nine Weeks Aug 13-Oct 9 40 days		2nd Nine Weeks Oct 15-Dec 19 42 days			3rd Nine Weeks Jan 6-Mar 5 41 days		4th Nine Weeks March 16-May 22 47 days		
Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10

\*\*Note: Throughout the year the units may shift due to testing and school activities.