

6th Grade Advanced Science Parent Guide

This course is designed to provide students with the advanced skills necessary to apply science concepts to their everyday life. Along with being able to ask questions and solve problems, students are able to collect and organize data, and draw conclusions based on their findings. While much of the focus is on physical science, the course is built on the following strands: scientific investigations and reasoning; matter and energy; force, motion, and energy; earth and space; and organisms and environment. In advanced science, students will engage in inquiry-based science including designing and conducting their own investigations, learning to use and develop critical thinking skills, and using problem-solving methods. Texas Essential Knowledge and Skills for Grade 6 Science [§112.18. Science, Grade 6, Adopted 2017](#)

1st 6 Weeks:

Introduction to Science/Safety
Interactions in an Environment
Prokaryotic & Eukaryotic Cells
Classifications of Organisms

4th 6 Weeks:

Elements and Compounds
Formation of a New Substance
Metals, Nonmetals & Metalloids
Density

2nd 6 Weeks:

Potential and Kinetic Energy
Changes in Force & Motion
Inclined Planes

5th 6 Weeks:

Thermal Energy
Energy Transformations
Energy Resources
Space: Gravity

3rd 6 Weeks:

Layers of the Earth
Tectonic Plates
Classifying Rocks and Minerals
Classifying Minerals

6th 6 Weeks:

Space: Gravity
Space: Celestial Bodies
Space Exploration

Questions? Please contact your course science teacher.