

7th Grade Advanced Science Parent Guide

This course is designed to provide students with the advanced skills necessary to be able to use evidence to construct testable explanations and predictions of natural phenomena. While much of the focus is on organisms and the environment, 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 7 Science [§112.19. Science, Grade 7, Adopted 2017](#)

1st 6 Weeks:

Introduction to 7th Grade Science and Safety
Photosynthesis
Tropisms & Turgor Pressure
Adaptations and Variations
Dichotomous Keys

4th 6 Weeks:

Cell Theory
Plant and Animal Cells
Organization of Organisms

2nd 6 Weeks:

Biomes
Food Chains, Food Webs, Energy Pyramids
Biodiversity
Succession
Weathering, Erosion, Deposition

5th 6 Weeks:

Human Body Systems
Chemical and Physical Changes in Digestion
Energy and Force

3rd 6 Weeks:

Weathering, Erosion, Deposition
Watersheds & Groundwater
Catastrophic Events

6th 6 Weeks:

Diversity of Organisms and Reproduction
Chromosomes
Heredity
Variations and Adaptions
Solar System and Life
Space Exploration

Questions? Please contact your course science teacher.