EAGLE MOUNTAIN SAGINAW ISD
Curriculum and Instruction

7th Grade Advanced Science Parent Guide

This course is designed to provide students with the skills necessary to apply science concepts to their everyday life. Students will ask questions, plan and conduct investigations, and explain phenomena using appropriate tools and models. Students will identify problems and design solutions using engineering design practices. Recurring themes and concepts will be explored to make connections between overarching concepts. This course is built on the following strands: scientific and engineering practices; 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 and learning to use and develop critical thinking skills. Texas Essential Knowledge and Skills for Grade 7 Science §112.27 Science, Grade 7, Adopted 2021

1st 6 Weeks: Introduction to Science/Safety – Interactive Science Notebooks Matter and Solutions: Elements and Compounds Changes in Matter Solutions Force and Motion: Speed & Velocity Analyzing an Objects Motion Newton's First Law	**4th 6 Weeks:** Plate Tectonics: Volcanoes Water and Human Activity: Surface Water Groundwater Importance of the Ocean Body Systems: Organization, Communication and Movement Organization in Plants and Animals Nervous System Endocrine & Reproductive Systems Skeletal & Muscular Systems
2nd 6 Weeks: Thermal Energy: Temperature and Kinetic Energy Thermal Energy Transfer Thermal Energy and Equilibrium	**5th 6 Weeks:** Body Systems: Energy and Defense Circulatory and Respiratory Systems Digestive and Urinary Systems Immune and Integumentary Systems Inheritance and Changes in Populations: How Traits are Passed How Populations Change Classification: Taxonomy
3rd 6 Weeks: The Solar System: Objects in the Solar System Gravity and Motion Life and Earth Plate Tectonics & Earth's Surface Earthquakes	**6th 6 Weeks:** Classification: Taxonomy Archaea, Bacteria, & Ecosystems Eukarya and Ecosystems Matter and Energy in Ecosystems: Energy Flow in Ecosystems Cycles of Matter

Questions? Please contact your course science teacher. Rev. 10-2-25