EAGLE MOUNTAIN SAGINAW ISD
Curriculum and Instruction

# Physics Parent Guide

Physics students will study a variety of topics that include: laws of motion, changes within physical systems and conservation of energy and momentum, forces, characteristics and behavior of waves, and electricity and magnetism. Students will ask questions, plan and conduct investigations, and explain phenomena using appropriate tools and models. Students will apply conceptual knowledge and collaborative skills to experimental design, implementation, and interpretation. Texas Essential Knowledge and Skills for Physics §112.45. Physics, Adopted 2021

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| **1st 6 Weeks:**<br>Modeling Motion:<br>Displacement and Velocity<br>Acceleration<br>Circular and Projectile Motion<br>Forces:<br>Force, Mass, and Acceleration<br>Types of Forces<br>Forces on Systems | **4th 6 Weeks:**<br>Work and Energy:<br>Classifying Work and Energy<br>Mechanical Energy<br>Conservation of Energy<br>Collisions:<br>Momentum and Impulse<br>Conservation of Momentum |
| **2nd 6 Weeks:**<br>Forces: Forces on Systems<br>Gravitational Forces:<br>Universal Gravitation<br>Orbital Motion<br>Kepler's Laws<br>Electric Forces:<br>Coulomb's Law<br>Electric Fields | **5th 6 Weeks:**<br>Real-World Momentum<br>Electricity and Circuits:<br>Electric Potential<br>Energy in Electric Circuits<br>Power Generation<br>Waves, Sound, and Light:<br>Properties of Waves |
| **3rd 6 Weeks:**<br>Electrical Forces: Electric Currents<br>Magnetic Forces:<br>Magnetic Forces and Fields<br>Inducing Magnetism<br>Inducing Current | **6th 6 Weeks:**<br>Wave Behavior and Sound<br>Wave Optics and Light<br>EM Wave Properties and Applications<br>Quantum Phenomena<br>Radiation and Matter |

**Questions?** Please contact your course science teacher.

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