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Description automatically generated**Physics Parent Guide**

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| 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](https://texreg.sos.state.tx.us/public/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=19&pt=2&ch=112&rl=45) | |
| 1st 6 Weeks: Modeling Motion:  Displacement and Velocity  Acceleration  Circular and Projectile Motion  Forces:  Force, Mass, and Acceleration  Types of Forces  Forces on Systems | 4th 6 Weeks: Work and Energy:  Classifying Work and Energy  Mechanical Energy  Conservation of Energy  Collisions:  Momentum and Impulse  Conservation of Momentum |
| 2nd 6 Weeks: Forces: Forces on Systems  Gravitational Forces:  Universal Gravitation  Orbital Motion  Kepler’s Laws  Electric Forces:  Coulomb’s Law  Electric Fields | 5th 6 Weeks: Real-World Momentum  Electricity and Circuits:  Electric Potential  Energy in Electric Circuits  Power Generation  Waves, Sound, and Light:  Properties of Waves |
| 3rd 6 Weeks: Electrical Forces: Electric Currents  Magnetic Forces:  Magnetic Forces and Fields  Inducing Magnetism  Inducing Current | 6th 6 Weeks: Wave Behavior and Sound  Wave Optics and Light  EM Wave Properties and Applications  Quantum Phenomena  Radiation and Matter |

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