**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%24ext.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 VelocityAccelerationCircular and Projectile MotionForces:Force, Mass, and AccelerationTypes of ForcesForces on Systems | 4th 6 Weeks:Work and Energy:Classifying Work and EnergyMechanical EnergyConservation of EnergyCollisions:Momentum and ImpulseConservation of Momentum |
| 2nd 6 Weeks:Forces: Forces on SystemsGravitational Forces:Universal GravitationOrbital MotionKepler’s LawsElectric Forces:Coulomb’s LawElectric Fields | 5th 6 Weeks:Real-World MomentumElectricity and Circuits:Electric PotentialEnergy in Electric CircuitsPower GenerationWaves, Sound, and Light:Properties of Waves |
| 3rd 6 Weeks:Electrical Forces: Electric CurrentsMagnetic Forces:Magnetic Forces and FieldsInducing MagnetismInducing Current | 6th 6 Weeks:Wave Behavior and SoundWave Optics and LightEM Wave Properties and ApplicationsQuantum PhenomenaRadiation and Matter |

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