



# ALLEN ACADEMY

## Physics Course Description 2019-2020

First Trimester	Second Trimester	Third Trimester
<p><b>Unit 1: Driving the Roads</b></p> <p>Topics: * 1-Dimensional Motion (Displacement, Velocity, Acceleration)</p> <p><b>Unit 2: Physics in Action</b></p> <p>Topics: * 2-Dimensional Motion (Projectile Motion including Trigonometry) * Newton's Laws of Motion</p>	<p><b>Unit 3: Safety</b></p> <p>Topics: * Energy (Kinetic, Potential, Conservation of Energy) * Work and Power * Impulse, Momentum, and Collisions</p> <p><b>Unit 4: Thrills and Chills</b></p> <p>Topics: * Circular Motion (Centripetal Acceleration, Centripetal Force, Apparent Weight) * Newton's Law of Gravitation</p> <p><b>Unit 5: Let Us Entertain You</b></p> <p>Topics: * Simple Harmonic Motion * Waves (Sound and Light) * Reflection and Refraction</p>	<p><b>Unit 6: Electricity for Everyone</b></p> <p>Topics: * Static Electricity * Circuits * Thermodynamics</p> <p><b>Unit 7: Toys for Understanding</b></p> <p>Topics: * Magnetism</p> <p><b>Unit 8: Atoms on Display</b></p> <p>Topics: * Static Electricity and the Atom * Strong and Weak Nuclear Force * Radioactive Decay</p>