Physics for Everyday Living Timeline

Content Area: **Science**
Course(s):
Time Period: **36 Weeks**
Length: **180 Days**
Status: **Awaiting Review**

Physics for Everyday Living Timeline

Unit	Topic	Days
1. Introducing Physics	Making measurements Creating models Physical quantities Units Creating testing experiments from observations Hypothesis and prediction	15
2. Kinematics	Reference frames Quantities of motion (position, displacement, distance and path length) Rate of change and ratios Velocity Acceleration Graphing motion Motion Diagrams Vectors	30
3. Newtonian Mechanics	Systems Forces Force Diagrams Newton's First Law Sum of Forces Newton's Second Law Gravitational Force Law Newton's Third Law Friction Testing Experiments	35
4. Torque	Torque Forces in Two Dimensions Equilibrium Center of Mass Rigid Bodies	15
5. Impulse and Momentum	Conservation of Mass Conservation of Momentum Impulse Collisions Systems	25

	Momentum Bar Charts	
6. Work and Energy	Gravitational Potential Energy Kinetic Energy Elastic Potential Chemical and Thermal Energy Internal Energy Work Energy Bar Charts Conservation of Energy	30
7. Electricity and Magnetism	Charged Objects Electricity Conductors and Insulators Electric Forces Coulomb's Law Electric Potential Energy Circuits Voltage Current Resistance Ohm's Law	35

Optional Course of Study/Topical Outline with Timeline

Unit	Topic	Days