



Physics

Discover the fundamental physics concepts such as motion, electricity, optics, and more.

With our hands-on physics lab kits and lessons, students will perform exciting examinations involving motion, electricity, simple machines, and optics. They will cover fundamental physics concepts while utilizing sophisticated lab-grade equipment, including capacitors, resistors, lenses, masses, and ramps. Whether mapping magnetic fields or creating an electric motor, your students will experience the joy of discovery as they uncover the forces that describe our universe.

Semester 1 Lessons - LP-2232-PK-02

Specific Heat of Solids	Torque and Equilibrium
Simple Harmonic Motion	Newton's Law of Motion
Resonance	Kinematics
Measurement Techniques	Centripetal Acceleration
Math & Graphing Prep	Friction
Introduction to Experimental Errors and Uncertainty	Air Resistance
Hooke's Law	

Semester 2 Lessons - LP-2236-PK-02

Energy - Simulation	Discharge of a Capacitor
Radioactive Decay	Refractive Index of a Glass Slab
Resistors in Series and Parallel	Reflection
Ohm's Law	Polarimetry
Electric Fields & Electric Potential	Diffraction Grating

Additional Lessons

Kit-Free Virtual Labs

Mapping Magnetic Fields	Torque & Equilibrium - Simulation
Measurement Techniques	Pulleys - Simulation
Hypotheses, Laws, and Theories	Projectile Motion - Simulation
Pulleys	Hooke's Law - Simulation
Focal Lengths of a Convex Lens	Energy - Simulation
Conservation of Momentum	Conservation of Momentum - Simulation
Projectile Motion	Centripetal Acceleration - Simulation
Boyle's Law	Air Resistance - Simulation
Non-Contact Forces	Contact Forces - Pen & Paper Lesson
Contact Forces	Propagation of Uncertainty - Pen & Paper Lesson
Propagation of Uncertainty	Newton's Law of Motion - Pen & Paper Lesson
	Hypotheses, Laws, and Theories - Pen & Paper Lesson



Redefining Online Lab Science