

Physics Materials and Equipment List

Laboratory and Field Materials

Recommended *

Large Equipment

- Ammeter triple range: 0 - 1.5, 3 (1 per 2 students)
- Balance, triple beam (1 per 2 students)
- Bunsen Burner (1 per 2 students)
- Clamps 4" (1 per 2 students)
- Calculator, graphing (1 per 2 students)
- Caliper, micrometer (1 per 2 students)
- Caliper, vernier (1 per 2 students)
- Calorimeter (1 per 2 students)
- Cart, dynamics set (1 per 2 students)
- Cathode ray tube, sealed with screen (1 per room)
- Clock with second hand (1 per room)
- Cloud chamber (1 per 2 students)
- Collision Apparatus-two dimensions (1 per 2 students)
- Computer probes tube (1 per room)
 - sound • magnetic
 - light • photogate
 - temperature • pendulum
 - Geiger Miller
- Computer (1 or more per room)
- Conservation of Momentum Apparatus (1 per room)
- Coulomb's Law Apparatus (1 per 2 students)
- Discharge tubes, vacuum (1 per room)
- Electroscope, measuring (1 per 2 students)
- Galvanometer, center zero (1 per 2 students)
- Hall's carriage (1 per 2 students)
- Hammer, rubber (1 per 2 students)
- Hot plate (1 per 2 students)
- Inclined plane (1 per 2 students)
- Induction coil (1 per room)
- Lab masses set, brass (1 per 2 students)
- Lab masses set, hooked (1 per 2 students)
- Lamps, aluminum reflector (1 per 2 students)

- Light source, intense for ripple tank (1 per room)
- Magnets, strong, bar, pair (1 per room)
- Magnets, strong, horseshoe (1 per room)
- Optical bench set (1 per 2 students)
- Optics kit (1 per 2 students)
- Pendulum support (1 per 2 students)
- Power supply: AC, DC (1 per 2 students)
- Pulley with clamp for table edge (1 per 2 students)
- Resonance tube, 50 cm (1 per 2 students)
- Ring clamp (1 per 2 students)
- Ring stand (1 per 2 students)
- Ring stand screen (1 per 2 students)
- Ring, 4" (1 per 2 students)
- Ripple tank assembly, complete (1 per room)
- Ripple tank wave generator (1 per room)
- Slotted weights set (1 per 2 students)
- Stop watch (1 per 2 students)
- Stroboscope (1 per room)
- Trajectory apparatus (1 per 2 students)
- Tuning for set, 256 Hertz and above (1 per 2 students)
- Voltmeter triple range: 0-1.5, 3, 30A (1 per 2 students)
- Weight hangers (1 per 2 students)

Small Equipment

- Ball and ring (1 per room)
- Beakers, Pyrex, 400 mL (1 per 2 students)
- Beakers, Pyrex, 600 mL (1 per 2 students)
- Bimetallic strip (1 per classroom)
- Carbon paper (2 packages per room)
- Compasses, magnetic (2 per student)
- Cylinder, graduated, 10 mL (1 per 2 students)
- Cylinder, graduated, 50 mL (1 per 2 students)
- Cylinder, graduated, 500 mL (1 per 6 students)
- Cylinder, graduated, 1000 mL (1 per 6 students)
- Eye dropper (1 per student)
- Friction block with hook (1 per 2 students)
- Friction pads, fur (1 per 2 students)

- Friction pads, silk (1 per 2 students)
- Friction pads, wool (1 per 2 students)
- Handbook of Physical Constants (1 per room)
- Iron filings (1 box per room)
- Magnet, horseshoe (1 per room)
- Magnets, bar (1 per student)
- Magnets, bar, pair (1 per room)
- Mass, known specific heat, metal, small (1 per 2 students)
- Mass, unknown specific heat, metal, small (1 per 2 students)
- Nail, large iron (1 per 2 students)
- Nylon thread (1 spool per room)
- Paper clips (10 per student)
- Paper, white craft (1 roll per room)
- Pendulum bob (1 per 2 students)
- Pith ball pair, graphite or metal coated (1 per 2 students)
- Polarized lens (1 per room)
- Prism (1 per room)
- Protractor (1 per 2 students)
- Recorder timer (1 per 2 students)
- Recorder timer carbon discs (1 package per 2 students)
- Recorder timer tape (1 per 2 students)
- Resistors 2 @ 5 ohms power rating, 5 - 10 watts (1 per 2 students)
- Resistors 2 @ 10 ohms power rating, 5 - 10 watts (1 per 2 students)
- Resistors 2 @ 15 ohms power rating, 5 - 10 watts (1 per 2 students)
- Resistors 2 @ 30 ohms power rating, 5 - 10 watts (1 per 2 students)
- Rods, rubber (1 per 2 students)
- Rods, glass (1 per 2 students)
- Ruler, metric (1 per 2 students)
- Scale, spring 2.5N (1 per 2 students)
- Scale, spring 10N (1 per 2 students)
- Scale, spring, 20N (1 per 2 students)
- Screw driver (1 per 2 students)
- Slinky (1 per 2 students)
- Switch, knife blade (1 per 2 students)
- Tag board (1 per 2 students)
- Thermometers, Celsius, -2 - 110 °C, alcohol (1 per 2 students)
- Tracing paper (1 per 2 students)
- Twine, heavy cotton (1 ball per room)
- Wave motion rope (1 per 2 students)
- Wire, Copper, insulated, 18 gauge (100 m per room)

Safety Materials and Equipment

Required

- Aprons (1 per student)
- Eye/face wash (2 per room)
- Fire blanket (1 per room)
- Fire extinguisher (1 per room)
- First-aid kit (1 per room)
- Materials Safety Data Sheets (1 per room)
- Safety goggles disinfecting materials or equipment (1 set per room)
- Safety goggles, splash-proof (1 per student)

Recommended

- Transport cart (1 per room)
- Sink: hot and cold water (1 per 4 students)

Physics Materials and Equipment List

Audiovisuals

CD ROMs (1 set per room)

- Illustrations of Laws of Thermodynamics
- Photo Electric Effect
- Role of electromagnetic spectrum

Charts (1 per room)

- Electromagnetic spectrum
- Periodic Table of Elements
- Meter stick (1 per 2 students)

Consumables

- Dry ice
- Sheets of cardboard
- Wax

Outdoor Field Area

- Natural site for observation
- Local area: native plants, including trees, shrubs, grasses, with a water source for animals.

* Recommended lists were generated by analyzing the concept TEKS at each grade level. We encourage teams of teachers at local levels to make decisions regarding the needs of their individual science programs.