

PHYSICAL SCIENCES

GRADE	NGSS	STEMSCOPES LESSON	SUBJECT AREA	MATERIAL TYPE	PHYSICAL MATERIALS
K	K-PS3-1 K-PS3-2 K-2-ETS1-1	Energy from the Sun	Optics/Light	Equipment	prisms, colored glass, mirrors, spectrometers, colored light bulbs
	K-PS2-1 K-PS2-2	Pushes and Pulls	Forces	Equipment	toy cars, tracks, loop track w/marbles, slinkies, levers, blocks, pulleys, weights, bike wheel w/turn platform,
	K-PS2-1 K-PS2-2 K-2-ETS1-2	Speed & Direction	Forces	Equipment	toy cars, tracks, loop track w/marbles, slinkies, levers, blocks, pulleys, weights, bike wheel w/turn platform
G1	1-PS4-1	Sound	Sound	Equipment	sound meter, tuning forks & mallets, singing rods, instruments (just a few now), kalimba
	1-PS4-2 1-PS4-3	Behavior of light	Optics/Light	Equipment	prisms, colored glass, mirrors, spectrometers, colored light bulbs
	1-PS4-2 1-PS4-3	Behavior of light	Optics/Light	Kits	water prisms, light box
G2	2-PS1-1 2-PS1-2 2-PS1-3	Properties of Matter	Density	Equipment	floaters & sinkers kits, density displacement cups, blocks
	2-PS1-4	Changes from Heat	Thermodynamics	Equipment	heat plates
G3	3-PS2-3 3-PS2-5	Energy Transfer and Electric Currents	Electricity	Kits	electrostatic kits (fur, wool, rods, styrofoam mini balls in a container),
	3-PS2-3 3-PS2-4	Properties of Matter	Electricity	Kits	circuits boards, doorbells, switches, generators, Van der graaff generator, plasma globe, wires, battery holders
	3-PS2-3 3-PS2-4	Electric and Magnetic Forces	Magnetism	Equipment	magnets (several types), iron filings (shavings loose & in containers), remagnetizer, compasses
	3-PS2-3 3-PS2-4	Energy Transfer and Electric Currents	Electricity	Kits	circuits boards, doorbells, switches, generators, Van der graaff generator, plasma globe, wires, battery holders,
	3-PS2-1	Objects and Motion	Forces	Equipment	toy cars, tracks, loop track w/marbles, slinkies, levers, blocks, pulleys, weights, bike wheel w/turn platform,
G4	4-PS4-1	Motion of Waves	Waves	Equipment	slinkies
	4-PS3-4	Using Stored Energy	Electricity	Kits	circuits boards, doorbells, switches, generators, van der graaff generator, plasma globe, wires, battery holders
	4-PS3-2 4-PS3-3	Transfer of Energy in Collision	Forces	Equipment	toy cars, tracks, loop track w/marbles, slinkies, levers, blocks, pulleys, weights, bike wheel w/turn platform, magnet wands
	4-PS4-2	Light Reflection	Optics/Light	Equipment	prisms, colored glass, mirrors, spectrometers, colored light bulbs
G5	5-PS1-2	Changes to Matter	Thermodynamics	Equipment	heat plates, heat conductors: balls and ring, heat proof gloves, candle holder
	5-PS1-2	Changes to Matter	Chemistry	Equipment	glassware, scales, hot plates, mixer plate, bunsen burner, tongs, mits, safety goggles, pH meters, pH, temperature vernier probes, test tube holders, pH strips, droppers, molecule models, ring stands, pipette
G6	MS-PS3-3 MS-PS3-4 MS-ETS1-4	Thermal Energy Transfer	Thermodynamics	Equipment	heat plates
	MS-PS3-1 MS-PS3-5	Kinetic Energy	Forces	Equipment	toy cars, tracks, loop track w/marbles, slinkies, levers, blocks, pulleys, weights, bike wheel w/turn platform
	MS-PS3-4	Energy Transfer and Temperature	Chemistry	Equipment	glassware, scales, hot plates, mixer plate, bunsen burner, tongs, mits, safety goggles, pH meters, pH, temperature vernier probes, test tube holders, pH strips, droppers, molecule models, ring stands, pipette