

NATIONAL SCIENCE EDUCATION STANDARDS

Exploring Energy with TOYS

GRADE	CATEGORY	SUB-CATEGORY	STANDARD
5-8	Physical Science	Motions And Forces	If more than one force acts on an object along a straight line, then the forces will reinforce or cancel one another, depending on their direction and magnitude. Unbalanced forces will cause changes in the speed or direction of an object's motion.
5-8	Physical Science	Transfer Of Energy	Electrical circuits provide a means of transferring electrical energy when heat, light, sound, and chemical changes are produced.
5-8	Physical Science	Transfer Of Energy	Energy is a property of many substances and is associated with heat, light, electricity, mechanical motion, sound, nuclei, and the nature of the chemical. Energy is transferred in many ways.
5-8	Physical Science	Transfer Of Energy	Light interacts with matter by transmission (including refraction), absorption, or scattering (including reflection). To see an object, light from that object-emitted by or scattered from it-must enter the eye.
5-8	Science as Inquiry	Abilities Necessary To Do Scientific Inquiry	Communicate scientific procedures and explanations.
5-8	Science as Inquiry	Abilities Necessary To Do Scientific Inquiry	Design and conduct a scientific investigation.
5-8	Science as Inquiry	Abilities Necessary To Do Scientific Inquiry	Develop descriptions, explanations, predictions, and models using evidence.
5-8	Science as Inquiry	Abilities Necessary To Do Scientific Inquiry	Identify questions that can be answered through scientific investigations.
5-8	Science as Inquiry	Abilities Necessary To Do Scientific Inquiry	Think critically and logically to make the relationships between evidence and explanations.
5-8	Science as Inquiry	Abilities Necessary To Do Scientific Inquiry	Use appropriate tools and techniques to gather and analyze, and interpret data.
5-8	Science as Inquiry	Abilities Necessary To Do Scientific Inquiry	Use mathematics in all aspects of scientific inquiry.