

Ohio Science Content Standards

Energy InfoBook
Energy Explorations
Energy Efficiency Activities
Energy Carnival
Energy Bike

4th Grade

Science and Technology

1.	Explain how technology from different areas has improved human lives.	X	X			
2.	Investigate how technology and inventions change to meet peoples' needs and wants.		X	X		

5th grade

Earth and Space Sciences

5.	Explain how the supply of many non-renewable resources is limited and can be extended through reducing, reusing, or recycling but cannot be extended indefinitely.	X		X	X	
6.	Investigate ways Earth's renewable resources can be maintained.	X	X	X	X	

Physical Science

1.	Define temperature as the measure of thermal energy and describe the way it is measured.		X			
2.	Trace how thermal energy can transfer from one object to another by conduction.		X			
3.	Describe that electrical current in a circuit can produce thermal energy, light, sound, and/or magnetic forces.	X	X			X
4.	Trace how electrical current travels by creating a simple electric circuit that will light a bulb.	X	X			X
6.	Describe and summarize observations of the transmission, reflection, and absorption of sound.		X			

Science and Technology

1.	Investigate positive and negative impacts of human activity and technology on the environment.	X	X	X		X
3.	Explain how the solution to one problem may create other problems.	X	X	X		

6th grade

Physical Sciences

5.	Explain that the energy found in nonrenewable resources such as fossil fuels originally came from the sun and may renew slowly over millions of years.	X			X	
6.	Explain that energy derived from renewable resources such as wind and water is assumed to be available indefinitely.	X			X	
7.	Describe how electric energy can be produced from a variety of sources.	X	X		X	X
8.	Describe how renewable and nonrenewable energy resources can be managed.	X	X	X	X	X

Science and Technology

1.	Explain how technology influences the quality of life.	X	X	X		
2.	Explain how decisions about the use of products and systems can result in desirable or undesirable consequences.	X	X	X		X

7th grade

Physical Sciences

2.	Describe how an object can have potential energy due to its position or chemical composition and can have kinetic energy due to its motion.	X	X			X
3.	Identify different forms of energy.	X	X			X
4.	Explain how energy can change forms but the total amount of energy remains constant.	X	X			X
5.	Trace energy transformations in a simple closed system.	X	X			X

Science and Technology

2.	Describe how decisions to develop and use technologies often put environmental and economic concerns in direct competition with each other.	X	X	X		
3.	Recognize that science can only answer some questions and technology can only solve some human problems.	X	X	X		

OEP Energy Workshops and Fairs also meet many of the requirements for the **Scientific Inquiry** and **Scientific Ways of Knowing** Indicators.