

BUILDING BLOCKS OF PHYSICAL SCIENCE

Energy

What is energy, and what can it do? Follow your cartoon guide in Energy as he travels through cities, turbines, dams, and even the soil to find out!

What did you learn?

EST	

- 1. Almost all of the energy on Earth comes from the ...
 - a. Moon
 - b. Water
 - c. Grass
 - d. Sun
- 2. Heat energy can be used to do what?
 - a. Heat homes
 - b. Run machines
 - c. Melt materials
 - d. All of the above
- 3. Which animal changes chemical energy into light energy?
 - a. Octopus
 - b. Jellyfish
 - c. Tiger
 - d. Flamingo

- 4. How many years does it take for fossil fuels to form?
 - a. More than 1,000,000
 - b. 10
 - c. 1,000
 - d. 100
- 5. Can you explain how wood turns to ash?
- 6. Can you describe what happens to the chemical energy in plants and animals when they die?

TRUE	OR FALSE?					
	 Energy makes things move and do work. 		4. Light energy comes only from the sun.			
	If you apply fire to a pot of water, nothing will happen.		Energy can be both created and destroyed.			
	3. Plants use energy from the sun to make food.		6. Biofuels are fuels made from plants and other natural matter.			



ANSWERS

- **1. d. Sun.** According to page 8, we know that, "Almost all of the energy on Earth comes from the sun." So, the correct answer is D.
- 2. d. All of the above. According to page 10, we know that, "Heat energy can heat our homes, run machines, melt materials, and make electricity." So, the correct answer is D.
- **3. b. Jellyfish.** According to page 17, we know that, "Some deep-sea jellyfish change chemical energy into light energy so that they can glow in the dark!" So, the correct answer is B.
- **4. a. More than 1,000,000.** According to page 21, we know that, "It takes millions of years for fossil fuels to form." So, the correct answer is A.
- **5.** According to page 7, we know that, "When you burn the wood, the heat energy from the fire turns the wood to ash."
- **6.** According to page 9, we know that, "Worms and other small living things break down the plant and animal matter. This matter releases nutrients into the soil that helps new plants to grow."

TRUE OR FALSE? ANSWERS

- **1. True.** According to page 4, we know that, "Energy makes things move and do work." So, the correct answer is True.
- **2. False.** According to page 7, we know that, "If you apply fire to a pot of water, it will eventually boil." So, the correct answer is False.
- **3. True.** According to page 8, we know that, "Plants use energy from the sun to make food." So, the correct answer is True.
- **4. False.** According to page 11, we know that, "Light energy also comes from the sun and objects like lamps or computer screens." So, the correct answer is False.
- **5. False.** According to page 16, we know that, "Energy can't be created or destroyed." So, the correct answer is False.
- **6. True.** According to page 28, we know that, "Biofuels are fuels made from plants and other natural matter." So, the correct answer is True.

