### ACTIVITY 1: PAGE 1

#### ENERGIZE YOUR FUTURE WITH SHELL

# WHAT'S YOUR ENERGY KNOWLEDGE?

NAME \_



We use energy all day, every day. By 2050, the worldwide demand for energy is expected to double. Where will that energy come from? Take this quiz to find out how much you know about different kinds of energy sources—those we use now, and those we may use in the future.

1. These cells convert sunlight into electricity.

A. super cells	<b>C.</b> photovoltaic cells
<b>B.</b> turbine cells	<b>D.</b> polyester cells

2. Which device produces electricity from hydrogen?

A. wind turbine	C. solar panel
B. fuel cell	<b>D.</b> nuclear reactor

3. The 3-D Seismic Survey is a process that uses seismic waves (waves that travel through the Earth). Geologists (scientists who study the structure of the Earth) send seismic waves deep underground. When the waves hit something reflective, they bounce back up. The longer it takes the waves to bounce back up, the further down that reflective item is. Geologists can use this process to locate.

A. a site of high wind speed on which to build a wind farm

**B.** a site of possible oil deposits in the Earth's subsurface

C. a river or waterfall with sufficient kinetic energy to generate electricity

D. none of the above

4. Ethanol is a biofuel. It can be made from.

A. wheat	C. corn
B. rice	<b>D.</b> all of the above

5. Which of the following nonrenewable fuels did not form from plants and animals?

Α.	coal	C.	oil			
В.	natural gas	D.	none	of	the	above

6. What device inside the wind turbine produces electricity?

A. blade	C.	gearbox
----------	----	---------

**B.** tower **D.** generator

7. A possible source for future energy, is the most abundant element in the universe.

- A. carbon B. hydrogen
- **C.** oxygen **D.** none of the above

(cont.)

## ACTIVITY 1: PAGE 2

### ENERGIZE YOUR FUTURE WITH SHELL

8.	What is the most efficient	way to generate electricity?			
	A. solar power	<b>C.</b> biofuel power			
	<b>B.</b> hydropower	D. fossil fuel power			
9.	<b>9.</b> Tidal energy involves filling reservoirs on the shore then releasing the water during low tid energy producing plant of this kind is located in France and powers 250,000 homes. Tid form of:				
	A. solar power	<b>C.</b> biofuel power			
	<b>B.</b> hydropower	D. fossil fuel power			
10	Which of the following co	ould not exist without energy from the sun?			
	A. wind power	C. neither			
	<b>B.</b> hydropower	D. both			
11.	Which country has the hig	hest reserve of natural gas?			
	A. China	C. India			
	B. United States	D. Russia			
12	. Which country consumes t	he most energy?			
	A. China	C. India			
	<b>B.</b> United States	D. Russia			
13.	. The advantage of Liquefied	d Natural Gas (LNG) is that.			
	A. it is easier to transport	than natural gas			
	<b>B.</b> it occupies less space t	han natural gas			
	C. it can be stored more e	asily than natural gas			
	<b>D.</b> all of the above				
14.	In 1882, Thomas Edison st lighting households. It was	arted the first power station in New York City. It supplied electricity for powered by.			
	A. biofuel	C. dirt			
	B. coal	D. oil			

**Challenge:** Have a "town meeting" about energy. With your group, convince the rest of the "townspeople" to accept your energy source for the town. Research your fuel of choice (hydrogen, biofuel, solar, wind, etc.) so you are knowledgeable on the topic and persuasive in your speech.

Visit www.shell.us/energizeyourfuture for more information about energy resources and history. © 2013 Shell Oil Company.