

Read “Know What? No, What?” (pages 1, 2, 10) to answer the following multiple-choice questions, selecting the best answer of those provided.

1. **The article states that the sun is the biggest source of energy. How does the article say that we can see evidence of the sun’s ability to provide electricity to homes?**
  - a) From the water cycle, which includes water evaporating and then becoming rainfall
  - b) From the visible growth of plants, particularly vegetables that provide us with food
  - c) From the presence of solar panels on rooftops indicating the use of solar energy
  - d) From the fact that the sun is the largest source of solar energy in our solar system
  
2. **Which one of the following is an example of a potential energy source?**
  - a) Banana
  - b) Extension cord
  - c) Dam
  - d) Coffee maker
  
3. **According to the article which of the following statements is NOT true?**
  - a) We can observe and experience energy in a number of different forms.
  - b) The only forms of energy are heat, light, motion, electrical, nuclear and chemical.
  - c) Getting hit in the gut with a soccer ball is an example of energy at work.
  - d) Energy’s work happens in ways we can’t observe, even at a microscopic level.
  
4. **The sun provides energy that solar panels capture and convert to electricity. Which of the following pairs has a similar relationship as the sun and solar panels?**
  - a) Solar power/hydropower
  - b) Moving water/dam
  - c) Nuclear energy/chemical energy
  - d) Potential energy/kinetic energy
  
5. **Which of the following is true of electrons?**
  - a) Electrons are smaller than atoms.
  - b) Electrons flow in an orbit around an atom’s nucleus.
  - c) The flow of electrons is what creates electricity.
  - d) All of the above
  
6. **What is the relationship between lightning and the electricity that we use at home?**
  - a) Lightning and electricity both result from electrons moving to new atoms.
  - b) Benjamin Franklin invented electricity from observing lightning with a kite.
  - c) Power plants can capture the energy from lightning and convert it to electricity.
  - d) Rarely is someone struck by lightning twice or shocked by bad wiring twice.
  
7. **Which one of the following is NOT part of the generation of electricity at a power generator?**
  - a) Turbine
  - b) Steam
  - c) Magnets
  - d) Kitchen appliance

- 8. Which of the following is the best explanation for why coal is a non-renewable resource?**
- a) The supply of coal is limited and can't be replaced once it's used.
  - b) Geothermal, solar and wind energy are all examples of renewable resources.
  - c) Coal provides the largest source of energy to generate electricity in the U.S.
  - d) The burning of coal creates carbon dioxide (CO<sub>2</sub>) in the atmosphere.
- 9. What does the article suggest is likely to occur in the future as technologies for power generation improve?**
- a) Power generators will utilize more renewable resources to generate electricity.
  - b) Both solar and wind power will be sources for more electricity than they are now.
  - c) Power generators will cause less air pollution in the future than they do now.
  - d) All of the above
- 10. Though the article uses a title that is a clever play on words, it doesn't indicate what the article is about. Which of the following titles would give readers the best idea of the article's focus?**
- a) "You Have Entered the Energy Zone"
  - b) "Answers to Questions about Energy & Electricity"
  - c) "What Is a Renewable Resource?"
  - d) "Alliant Energy Gives You the Power!"

