

Name:

Date:

Class:

## Lesson 7.1: Energy Systems

### Know and Understand

*Answer the following questions using the information provided in this lesson.*

1. Which of the following is a renewable energy source? (7.1.1)

- A. Crude oil
- B. Solar energy
- C. Coal energy
- D. Nuclear energy

Answer:

2. Which energy source uses photovoltaic cells? (7.1.1)

- A. Wind
- B. Nuclear
- C. Solar
- D. Natural gas

Answer:

3. How is wind converted to a usable energy form? (7.1.1)

- A. Turbine blades turn a drive shaft in a wind turbine.
- B. Turbine blades spin at a high rate of speed.
- C. The wind turbine shaft operates a generator.
- D. The wind turbine nacelle rotates with the direction of the wind.

Answer:

4. The energy source that converts the internal heat of Earth to make energy is \_\_\_\_\_. (7.1.1)

- A. geothermal energy
- B. thermos nuclear energy

- C. subterranean biomass energy
- D. All are correct.

Answer:

5. Why is it better to use methane gas as an energy source as opposed to just allowing it to escape into the atmosphere? (7.1.1)
- A. Methane smells bad.
  - B. Methane is too valuable to let it escape into the atmosphere.
  - C. Methane contributes to global warming.
  - D. Methane is the most efficient energy source available.

Answer:

6. How do agriculturists benefit from using biomass for energy production? (7.1.1)
- A. It is a free source of energy, with most biomass being produced in rural areas.
  - B. It can be made from certain crops, creating a demand for these crops.
  - C. Livestock can also eat biomass, giving it a dual purpose.
  - D. Biomass power plants can also be used with coal to produce energy.

Answer:

7. Which of the following is used in the United States primarily to generate electricity? (7.1.2)
- A. Wind
  - B. Nuclear
  - C. Solar
  - D. Coal

Answer:

8. Which fossil fuel typically produces the least amount of pollution? (7.1.2)
- A. Natural gas
  - B. Crude oil
  - C. Coal

D. Propane

Answer:

9. Which of the following is not made from crude oil? (7.1.2)

A. Cooking oil

B. Liquefied petroleum gas

C. Candle wax

D. Plastics

Answer:

10. Why is nuclear energy considered a nonrenewable energy source? (7.1.2)

A. Uranium fuel cannot make energy without coal.

B. Most nuclear power plant buildings do not last long.

C. Uranium is a natural metal with a limited supply.

D. Nuclear energy is a renewable resource.

Answer: