

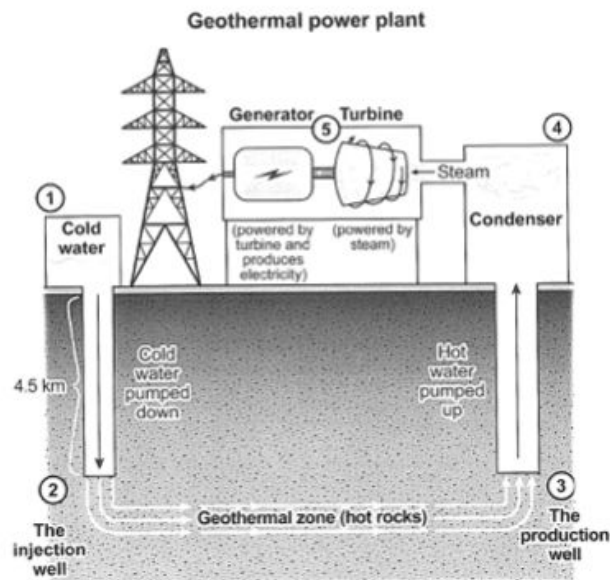
## Energy Resources Exam

Directions: Read each question carefully and choose the best answer.

1. Powering cell phones, tablets, and video games consoles requires the use of electricity. Which of the following resources listed are renewable energy resources?

- A. Coal and oil
- B. Wind and solar
- C. Natural gas and geothermal energy
- D. Solar and petroleum

2. Geothermal energy is an energy resource which relies on the following infinite resource?



- A. Energy from the sun
- B. Energy from wind
- C. Energy from running water
- D. Energy from the heat in earth's interior

3. Georgia Power is building a new power plant to provide energy to several communities. What is a major advantage of using solar energy versus coal or natural gas?
- A. Solar energy is a renewable resource.
  - B. Solar energy is available 24 hours a day.
  - C. Solar energy is cheaper than coal or natural gas.
  - D. Solar energy is nonrenewable.
4. How does oil and the sun compare as energy resources?
- A. Coal is renewable and the sun is nonrenewable.
  - B. Coal is renewable and the sun is renewable.
  - C. Coal is nonrenewable and the sun is renewable.
  - D. Coal is nonrenewable and the sun is nonrenewable.
5. Coal, oil, and natural gas, also known as fossil fuels, are energy resources that increase the amount of pollution in our atmosphere. Which of the following is also a disadvantage for excessive use of coal, oil, and natural gas?
- A. Fossil fuels are renewable energy resources.
  - B. Fossil fuels are available in an unlimited supply.
  - C. Fossil fuels cannot be replaced within a human lifetime.
  - D. Fossil fuels are abundant on Earth.
6. Flint Energies charged a customer \$62.50 for 800 kWh. What was the unit rate charged per kWh?
- A. 0.045230
  - B. 0.054632
  - C. 0.069834
  - D. 0.078125

7. Georgia Power charges customers 0.0088 cents per kWh. If a house uses 2,195 kWh, which of the following represents the total amount of their electric bill?
- A. \$249,431.82
  - B. \$1.93
  - C. \$19.32
  - D. \$193.20
8. An Xbox video game console uses 36 Watts of energy. How many hours (approximately) can Tyler play Fortnite before he uses 1 kWh of energy? (1 kilowatt-hour = 1,000 Watts)
- A. 3.6 hours
  - B. 16 hours
  - C. 22 hours
  - D. 28 hours
9. A microwave oven uses 1,750 Watts of energy. How many kilowatt-hours of energy does the microwave consume when in use? (1 kilowatt-hour = 1,000 Watts)
- A. 1.5 kWh
  - B. 1.75 kWh
  - C. 2.0 kWh
  - D. 2.25 kWh
10. A water heater consumes 4.5 kWh. If Emma takes a hot shower for 30 minutes, how many kWh does the water heater consume?
- A. 9.0 kWh
  - B. 4.5 kWh
  - C. 2.25 kWh
  - D. 1.125 kWh

**Energy Resources Unit Exam  
Answer Key & Aligned Standards**

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|-------------|--------------------|
| <b>1. B</b> | <b>S6E6a</b>       |
| <b>2. D</b> | <b>S6E6a</b>       |
| <b>3. A</b> | <b>S6E6a</b>       |
| <b>4. C</b> | <b>S6E6a</b>       |
| <b>5. C</b> | <b>S6E6a</b>       |
| <b>6. D</b> | <b>MGSE6.RP.3b</b> |
| <b>7. C</b> | <b>MGSE6.RP.3b</b> |
| <b>8. D</b> | <b>MGSE6.RP.3d</b> |
| <b>9. B</b> | <b>MGSE6.RP.3d</b> |
| <b>10.C</b> | <b>MGSE6.RP.3b</b> |