

TEACHER KEY

Energy Quiz

Matching: Choose the correct definition for each vocabulary word.

- | | |
|-----------------------------------|---|
| 1. F Insulator | A. A device that moves a magnet near a wire to create a steady flow of electrons. |
| 2. G Atom | B. The ability to do work. |
| 3. D Electron | C. An energy source formed from the decomposition of dead organisms. |
| 4. B Energy | D. One of the particles found in an atom. |
| 5. C Fossil Fuel | E. A resource that can be replaced or replenished at a rate equal to or faster than the rate at which it is used. |
| 6. A Generator | F. A material whose atoms do not transfer, or "share," electrons easily. |
| 7. I Nonrenewable resource | G. The basic unit of matter. |
| 8. E Renewable resource | H. A material whose atoms transfer, or "share," electrons easily with other atoms. |
| 9. H Conductor | I. A resource that exists in finite amounts on our planet and cannot be replenished. |
| 10. J Watt | J. A measurement of the amount of power an electrical current has. |

Multiple Choice: Choose the best answer for each question.

11. What charge does an electron have?
- A. Positive
 - B. Negative**
 - C. No charge
 - D. It can change
12. The amount of energy used by devices in your home in a month is measured in:
- A. Watts (W)
 - B. Kilowatts (kW)
 - C. Kilowatt-Hours (kWh)**
 - D. Volts (V)

13. What is electrical energy?
- A. The ability to do work.
 - B. The energy of moving electrons.**
 - C. The energy of electricity.
 - D. The force of moving atoms.
14. What is the most common energy production method in the United States?
- A. Wind energy
 - B. Nuclear energy
 - C. Coal energy**
 - D. Natural gas energy
15. What energy production method produces the most air pollution?
- A. Natural gas energy
 - B. Nuclear energy
 - C. Hydroelectric energy
 - D. Coal energy**
16. What is the major drawback or risk of nuclear energy production?
- A. It creates air pollution.
 - B. It creates water pollution.
 - C. It creates radioactive waste.**
 - D. It destroys ecosystems.
17. What is a drawback or risk of wind energy production?
- A. It can kill birds or bats.**
 - B. It creates air pollution.
 - C. It creates water pollution.
 - D. All of the above.
18. What is a benefit of wind energy production?
- A. It is renewable.
 - B. It doesn't create pollutants.
 - C. It has relatively low maintenance costs.
 - D. All of the above.**
19. What is a drawback of solar energy production?
- A. It isn't renewable.
 - B. It is expensive to set up.**
 - C. It only works if the sun is out.
 - D. All of the above.
20. An electric generator converts _____ energy into electrical energy.
- A. Wind
 - B. Heat
 - C. Mechanical**
 - D. Nervous