

## TEACHER KEY

# Energy Quiz

**Matching:** Choose the correct definition for each vocabulary word.

- |                                   |   |
|-----------------------------------|---|
| 1. <b>F</b> Insulator             | A. A device that moves a magnet near a wire to create a steady flow of electrons.                                 |
| 2. <b>G</b> Atom                  | B. The ability to do work.  |
| 3. <b>D</b> Electron              | C. An energy source formed from the decomposition of dead organisms.  |
| 4. <b>B</b> Energy                | D. One of the particles found in an atom.   |
| 5. <b>C</b> 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. <b>A</b> Generator             | F. A material whose atoms do not transfer, or "share," electrons easily.  |
| 7. <b>I</b> Nonrenewable resource | G. The basic unit of matter.  |
| 8. <b>E</b> Renewable resource    | H. A material whose atoms transfer, or "share," electrons easily with other atoms.                                |
| 9. <b>H</b> Conductor             | I. A resource that exists in finite amounts on our planet and cannot be replenished.                              |
| 10. <b>J</b> 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