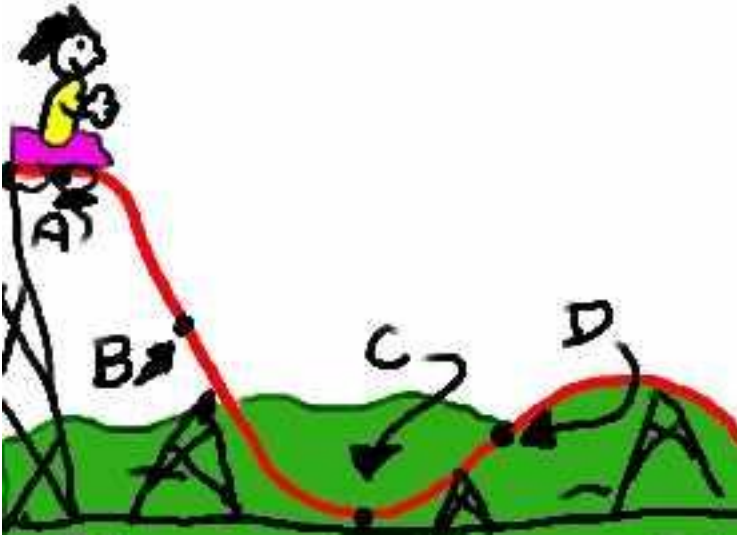


# Energy Grade 4 Quiz

## Teacher's Answer Key

1. Fill in the blank: A battery produces \_\_\_\_\_ energy from \_\_\_\_\_ energy. (electrical, chemical)
2. Another name for a battery is: (voltaic cell)
3. As one chemical in a battery loses electrons, what happens to the other chemical? (gains electrons)
4. What type of energy source is the solar panel most closely related to? (chemical battery)
1. Electricity is another name for the free flow of: (electrons)
2. Which of the following best describes how sound gets to us? (vibrating molecules)
3. Name two ways energy is transferred: (heat, sound, radiation, etc.)
4. True or false: A loud noise represents molecules that vibrate violently. (true)
5. What is one way to describe energy? (the ability to do work)
6. Work is when something moves when: (Energy is used over a distance.)
7. Name two simple machines: (lever, pulley, inclined plane)
8. A lever has three parts. Circle all that apply: (fulcrum, load, effort)



9. Where is the potential energy greatest? (A)

# Energy Grade 4 Quiz

Name \_\_\_\_\_

1. Fill in the blank: A battery produces \_\_\_\_\_ energy from \_\_\_\_\_ energy.
2. Another name for a battery is:
  - a. Solar array
  - b. Voltaic cell
  - c. Nuclear reactor
  - d. Fusion cell
3. As one chemical in a battery loses electrons, what happens to the other chemical?
  - a. It loses electrons
  - b. It gains electrons
  - c. Nothing
  - d. It decomposes
4. What type of energy source is the solar panel most closely related to?
  - a. Biofuel
  - b. Chemical battery
  - c. Nuclear reactor
  - d. Plant energy
5. Electricity is another name for the free flow of:
  - a. Protons
  - b. Quarks
  - c. Electrodes
  - d. Electrons
6. Which of the following best describes how sound gets to us?
  - a. Chemical electricity
  - b. Solar radiation
  - c. Heat conduction
  - d. Vibrating molecules
7. Name two ways energy is transferred:
  - a.
  - b.
8. True or false: A loud noise represents molecules that vibrate violently.
  - a. True
  - b. False
9. What is one way to describe energy?
  - a. The amount of atoms moving around at any given moment

- b. Electrons flowing from one area to another
- c. The ability to do work
- d. The square root of the speed of an electron

10. Work is when something moves when:

- a. Force is applied
- b. Energy is used
- c. Electrons are lost or gained
- d. A group of atoms vibrate

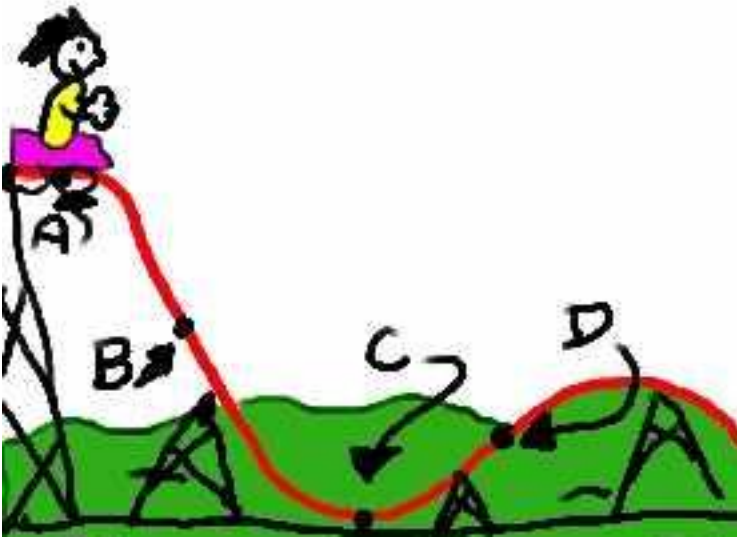
11. Name two simple machines:

a.

b.

12. A lever has three parts. Circle all that apply:

- a. Fulcrum
- b. Weight
- c. Load
- d. Effort



13. Where is the potential energy greatest?