Chapter 5
Energy: Forms and Changes

Name _____

Match the following vocabulary words with their definition. Place the appropriate letter on the line provided.

_____ 1. Energy

_____ 2. Mechanical Energy

_____ 3. Heat Energy

_____ 4. Chemical Energy

_____ 5. Electromagnetic Energy

_____ 6. Nuclear Energy

_____ 7. Kinetic Energy

_____ 8. Potential Energy

_____ 9. Gravitational Potential Energy

a. Energy of motion

b. Energy involved in the internal motion of particles of matter

c. Potential energy that is dependent on height above the Earth's Surface

d. Energy that bonds atoms or ions together

e. Energy found in the nucleus of an atom

f. Energy associated with motion

g. Energy of shape or position; stored energy

h. The ability to do work

i. Energy associated with moving charges

Answer the following questions in complete sentences.

10. In your own words describe energy and at least 3 ways that you use energy.

11. Can energy be transferred from one object to another? Explain

12. How many different forms of energy are discussed in the chapter? What are they?

13. Why is energy measured in the same unit as work?

14. What is the difference between Kinetic and Potential Energy?

15. What is the formula for Kinetic Energy?

16. What is the formula for Gravitational Potential Energy?

17. Describe the conversions between potential energy and kinetic energy as a tennis ball drops, hits the ground, and bounces back up.

18. What is the law of conservation of energy? How does it relate to energy conversions?

19. How is energy related to motion?

20. How is energy related to power?