Name _____ Date _____ Class _____

Content Practice A

LESSON 1

Forms of Energy

Directions: *On each line, write the term from the word bank that correctly completes each sentence. Some terms may be used more than once or not at all.*

electrical	**energy**	**kinetic**	**mechanical**	**nuclear**
potential	**radiant**	**sound**	**thermal**	**work**

1. Energy due to motion is _____ energy.

2. The amount of _____ energy an object has depends on the object's speed and mass.

3. Energy that is stored in the nucleus of an atom is _____ energy.

4. The ability to cause change is _____.

5. _____ energy is stored energy.

6. Energy that is carried by an electric current is _____ energy.

7. Gravitational, elastic, and chemical are three forms of _____ energy.

8. The transfer of energy that occurs when a force is applied over a distance is _____.

9. Energy that is the total of the kinetic energy and potential energy in an object or group of objects is _____ energy.

10. The energy of atoms and molecules in an object due to their motions is _____ energy.

11. Energy is the ability to do _____.

12. Energy carried by electromagnetic waves is called _____ energy.

Name _____ Date _____ Class _____

Content Practice B

LESSON 1

Forms of Energy

Directions: *Answer each question or respond to each statement on the lines provided.*

1. What are two definitions of energy?

_____

_____

2. Which form of energy do all moving objects have? Which two factors determine the amount of this energy that an object has?

_____

_____

3. **Define** *potential energy* and list three forms of potential energy.

_____

_____

4. **Define** *work*.

_____

_____

5. What does an object need before it can perform work?

_____

6. Objects have kinetic energy and potential energy. **List** six other forms of energy and write a phrase that describes each form.

_____

_____

_____

_____

_____

_____

Name _____ Date _____ Class _____

Content Practice A

LESSON 2

Energy Transformations

Directions: *On each line, write the term from the word bank that correctly completes each sentence. Some terms may be used more than once.*

electrical	**energy transformation**	**friction**	**kinetic**
law of conservation of energy	**potential**	**radiant**	**thermal**

1. According to the _____, energy cannot be created or destroyed.

2. A change from electrical energy to radiant energy to thermal energy is called a(n) _____.

3. A force that resists the sliding of one surface over another is _____.

4. A microwave oven changes _____ energy to radiant energy to _____ energy.

5. Suppose you are shooting a basketball toward a hoop. As the ball rises in the air, its _____ energy increases and its _____ decreases.

6. As the ball falls back toward the floor, its _____ energy increases and its _____ decreases.

7. Friction transforms some mechanical energy into _____ energy.

8. You use a lamp to change _____ energy into _____ energy.

9. When you use a battery, you transform chemical energy stored in the battery to _____ energy.

10. The exhaust from a car contains _____ energy that cannot be used. Scientists often refer to this energy that cannot be used as waste energy.

Name _____ Date _____ Class _____

Content Practice B **LESSON 2**

Energy Transformations

Directions: *Respond to each statement on the lines provided.*

1. **Write** a definition of *energy transformation*.

2. **Describe** the energy transformations that occur when you toss a ball upward and it falls. Include the causes of the transformations.

3. **Compare** the forms and amounts of energy before and after you apply the brakes of a bicycle and stop.

4. **Define** *friction*.

5. Give an example of how mechanical energy can be transformed into another type of energy.