
**Directed Reading for
Content Mastery**
**Section 1 ■ The Nature
of Energy**

Directions: Draw a line from each type of energy on the left to the example of this type of energy on the right.

- | | |
|-----------------------------------|--|
| 1. kinetic energy | energy that is stored |
| 2. chemical potential energy | energy stored in a stretched spring |
| 3. gravitational potential energy | energy of a spinning bicycle wheel |
| 4. elastic potential energy | energy stored in food |
| 5. potential energy | energy stored in a boulder on a mountainside |

Directions: Use these words to fill in the blanks below. Words may be used more than once.

energy

more

less

potential

kinetic

joule

chemical

- Two baseballs have the same mass. The ball that is closer to the ground has _____ gravitational potential energy than the other ball does.
- Two trucks have the same velocity but different mass. The truck with the greater mass has _____ kinetic energy than the other truck does.
- _____ is the ability to cause change.
- A _____ is a unit of measure of all forms of energy.
- When an object falls, some of its _____ energy changes to _____ energy.
- The _____ energy of an object depends on its mass and weight.
- The energy of food and other fuels is _____ potential energy.


**Directed Reading for
Content Mastery**
**Section 2 ■ Conservation
of Energy**

Directions: Write the term that matches each description below on the spaces provided. The boxed letters should spell the answer to question 9.

1	M									
		O								
2		U							R	
		S								
3		L		C						
4	F									
		V								
5	C									
		T								
6	L									
7	P									
8	K									

- Type of energy due to both the position and motion of an object
- Type of reaction in which mass is transformed into energy
- Type of energy transformed into thermal energy in a toaster
- Force that acts between two sticks when they are rubbed together
- Unit used to measure the amount of energy that people get from food
- Type of energy transformed into chemical energy by plants
- Type of energy that is greatest at the top of a swing's path
- Type of energy that is greatest at the bottom of a swing's path
- What law of energy has never been broken? _____


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energy

more

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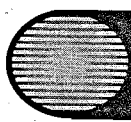
potential

kinetic

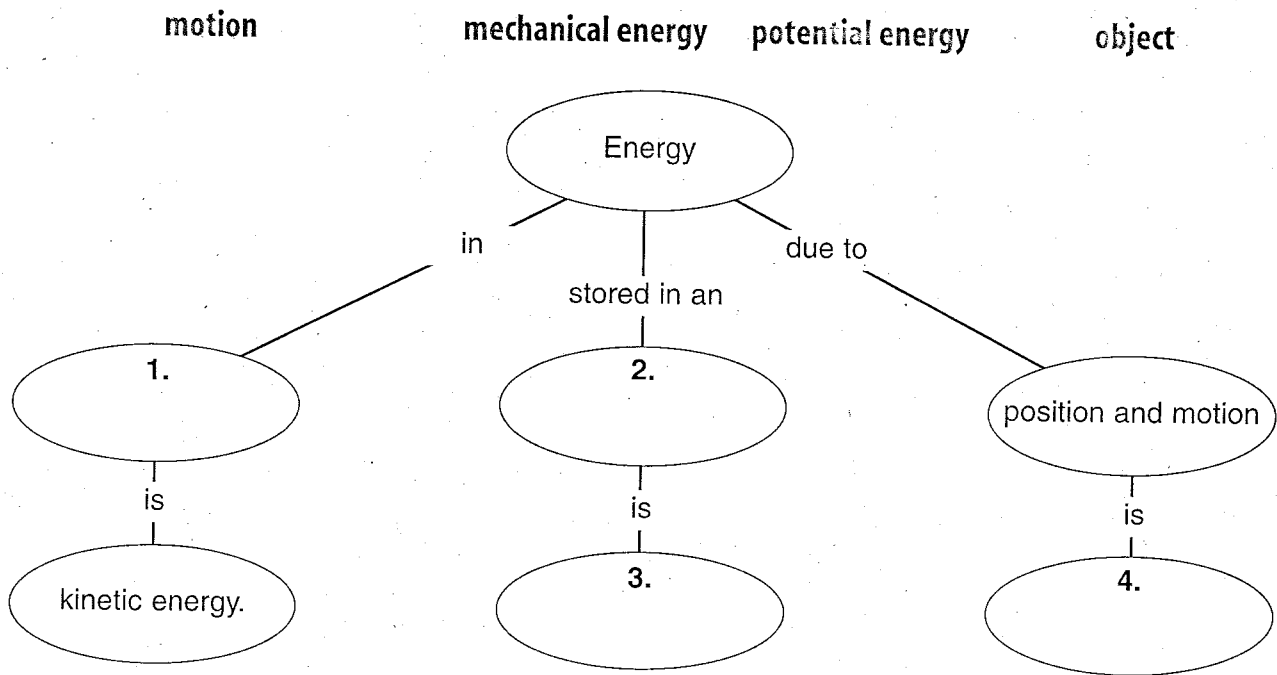
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Directions: Complete the concept map using the terms in the list below.



Directions: Three forms of potential energy are gravitational, chemical, and elastic. Write the correct form in the spaces beside the items below. Note that one item has two forms of potential energy.

- _____ 5. chocolate chip cookie
- _____ 6. pogo stick on impact
- _____ 7. gasoline
- _____ 8. bicycle at the top of a hill
- _____ 9. stretched rubber band
- _____ 10. apple in a tree