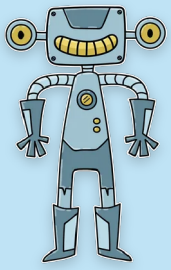
SCIENCE · ENERGY · GRADES 3–5

Forms of Energy

Match light, sound, heat, electrical, motion and chemical energy to an example of each.



Name: _____ **Date:** _____

Draw a line from each form of energy to an example.

light energy ●	● a drum being played
sound energy ●	● a ball rolling across the floor
heat energy ●	● a flashlight shining in the dark
electrical energy ●	● food in your lunchbox
motion energy ●	● a warm stove
chemical energy ●	● a cord powering a TV

Name two forms of energy you used this morning.

_____

_____

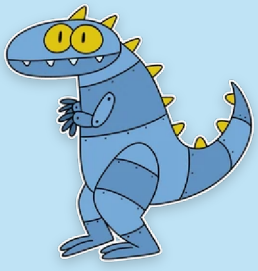
Art © Kevin Coulston

SCIENCE · ENERGY · GRADES 3–5

Potential or Kinetic Energy?

Sort ten examples into stored (potential) energy and moving (kinetic) energy.

Name: _____ **Date:** _____



Potential energy is stored energy, waiting to be used. **Kinetic energy** is the energy of something moving.

Write each example in the right column.

a running dog | a ball rolling down a hill | falling rain | a stretched rubber band | a book on a high shelf | a roller coaster at the very top | a pulled-back bow and arrow | wind blowing | a moving car | a ball at the top of a hill

Potential (stored)	Kinetic (moving)

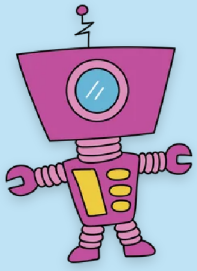
When does a swing have the most potential energy? When does it have the most kinetic energy?

Art © Kevin Coulston

SCIENCE · ENERGY · GRADES 4–5

Energy Changes

Fill in six sentences about energy changing form, from a toaster to a solar panel.



Name: _____ **Date:** _____

Energy is never used up. It changes from one form to another.

Word bank

heat · light · sound · motion · electrical

Fill in the blanks. You can use a word more than once.

1. A toaster changes electrical energy into _____ energy.
2. A flashlight changes the stored energy in its batteries into _____ energy.
3. Hitting a drum changes motion energy into _____ energy.
4. A solar panel changes sunlight into _____ energy.
5. A fan changes electrical energy into _____ energy.
6. A campfire changes the stored energy in wood into heat and _____.

Think of one more thing that changes energy. What does it change?

_____

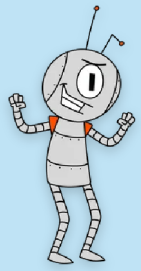
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SCIENCE · ENERGY · GRADES 3–5

Bouncing Ball Experiment

Drop a ball from four heights, measure each bounce three times and explain where the energy goes.



Name: _____ **Date:** _____

You need: a bouncy ball, a meter stick taped to a wall and a partner. **Do it:** drop the ball (do not throw it) from each height. Your partner watches how high it bounces.

Drop height	Bounce 1 (cm)	Bounce 2 (cm)	Bounce 3 (cm)	Highest
25 cm				
50 cm				
75 cm				
100 cm				

What happens to the bounce when you drop the ball from higher up?

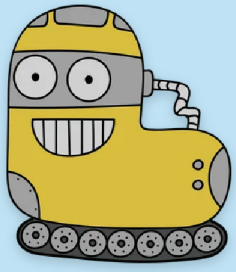
The ball never bounces as high as you dropped it. Where does some of the energy go?

Art © Kevin Coulston

SCIENCE · ENERGY · GRADES 3–5

Energy Hunt at Home

Find the things that use electricity in each room at home and plan how your family could use less.



Name: _____ **Date:** _____

List the things that use electricity in each room.

Room	Things that use electricity	How could we use less?
Kitchen		
Living room		
Bedroom		
Bathroom		
Garage or yard		

Things I found in all _____ **Room with the most** _____

Our family plan to save energy:

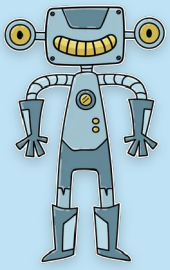
1. _____
2. _____
3. _____

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ANSWER KEY · ENERGY · GRADES 3–5

Answer Key: Forms of Energy

Answers for grown-ups. Some questions have more than one good answer.



Draw a line from each form of energy to an example.

light energy	a flashlight shining in the dark
sound energy	a drum being played
heat energy	a warm stove
electrical energy	a cord powering a TV
motion energy	a ball rolling across the floor
chemical energy	food in your lunchbox

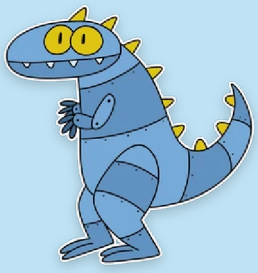
Name two forms of energy you used this morning.

Art © Kevin Coulston

ANSWER KEY · ENERGY · GRADES 3–5

Answer Key: Potential or Kinetic Energy?

Answers for grown-ups. Some questions have more than one good answer.



Potential energy is stored energy, waiting to be used. **Kinetic energy** is the energy of something moving.

Write each example in the right column.

a running dog · a ball rolling down a hill · falling rain · a stretched rubber band · a book on a high shelf · a roller coaster at the very top · a pulled-back bow and arrow · wind blowing · a moving car · a ball at the top of a hill

Potential (stored)	Kinetic (moving)
a ball at the top of a hill	a ball rolling down a hill
a stretched rubber band	a running dog
a book on a high shelf	wind blowing
a roller coaster at the very top	falling rain
a pulled-back bow and arrow	a moving car

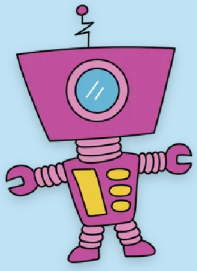
When does a swing have the most potential energy? When does it have the most kinetic energy?

Art © Kevin Coulston

ANSWER KEY · ENERGY · GRADES 4–5

Answer Key: Energy Changes

Answers for grown-ups. Some questions have more than one good answer.



Energy is never used up. It changes from one form to another.

Word bank

heat · light · sound · motion · electrical

Fill in the blanks. You can use a word more than once.

1. A toaster changes electrical energy into **heat** energy.
2. A flashlight changes the stored energy in its batteries into **light** energy.
3. Hitting a drum changes motion energy into **sound** energy.
4. A solar panel changes sunlight into **electrical** energy.
5. A fan changes electrical energy into **motion** energy.
6. A campfire changes the stored energy in wood into heat and **light**.

Think of one more thing that changes energy. What does it change?

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