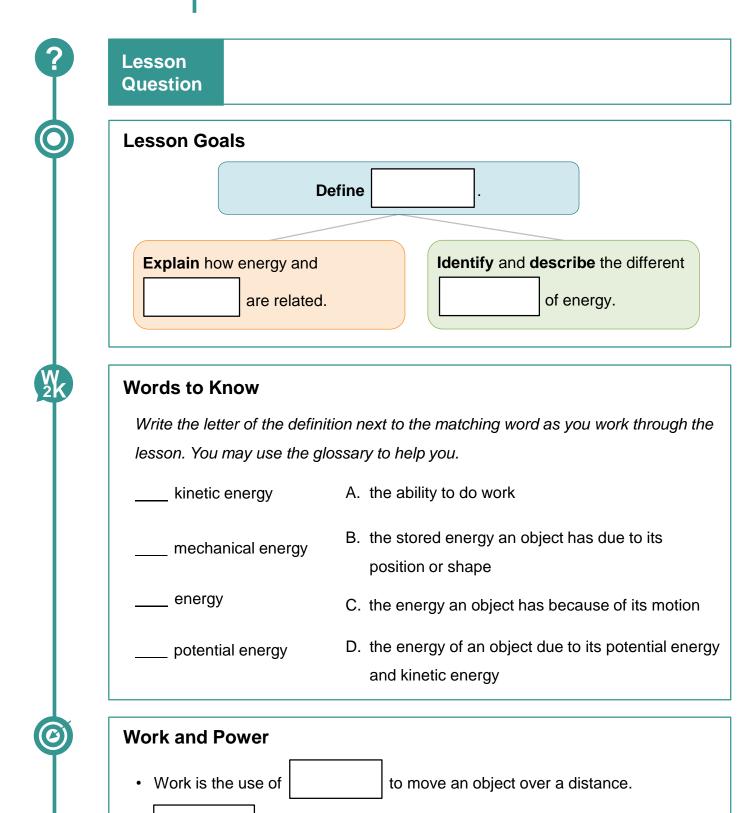
#### **Edgenuity**®

### Warm-Up

#### Introduction to Energy



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is the rate at which work is done.

# Instruction

### Introduction to Energy

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Energy
is the ability to do work.
Work being done means energy is being .
Work and Energy
Work energy.
Work can energy between objects.
Work can cause a change in the of energy.
Work can change potential energy into  energy, or the
energy of motion.
Energy and work share the same unit—  (J).



#### **Words to Know**

Fill in this table as you work through the lesson. You may use the glossary to help you.

compress	to press in to make more	
chemical potential energy	the energy stored in the	of atoms

# Instruction

### Introduction to Energy



Words to Know		
elastic potential energy	the energy stored in a compressed or object	
gravitational potential energy	the energy of an object due to its above a surface	
internal energy	the potential and kinetic energies of the	

Kinetic and Potential Energy			
•	energy is the energy an object has because of its .		
	More = more energy		
	More motion = more		
•	energy is stored energy because of an object's		
	or shape.		

Mechanical Energy			
•		energy is the energy of an object because of its potential	
	and kinetic energies.		
	• Due to	and position	

# Instruction

### Introduction to Energy

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Gra	Gravitational Potential Energy		
•		pc	tential energy is energy of an object because of its
		above a s	urface.
	• More		= more energy
	• More		= more energy

Flastic	<b>Potential</b>	<b>Energy</b>
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•		potential energy is energy stored because of stretching or
	compressing a	n object.

• To	means to press in or make more compact
	•



#### **Words to Know**

Fill in this table as you work through the lesson. You may use the glossary to help you.

the energy stored in the nucleus of an atom
a disturbance that carries energy from one place to another through matter and space
a type of wave that carries energy through space where there is almost no matter

# Instruction

### Introduction to Energy



Words to Know				
		the energy associated with electromagnetic waves		
		the energy due to the flow electrical charges		
		the part of total internal energy that can be transferred		
<ul> <li>Kinetic and Potential Energy at Different Scales</li> <li>Energy is described using two different scales: the energy of the object or the energy of the particles that make up the object.</li> <li>is the total potential and kinetic energies of the particles in a substance.</li> </ul>				
Chemical Potential Energy     potential energy is energy stored in the chemical bonds of atoms.				

#### **Thermal Energy**

energy is part of the total internal energy transferred
between substances.

# Instruction

#### Introduction to Energy

Slide 12

#### **Nuclear Energy**

•	energy is energy stored in the nucleus of an atom.

#### **Electrical Energy**

- energy is energy from the flow of electrical charges.
  - Can be positive or

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#### **Radiant Energy**

- is a disturbance that carries energy from one place to another.
  - An wave is a type of wave that carries energy through space where there is almost no matter.
  - energy is energy associated with electromagnetic waves.

# Summary

### Introduction to Energy

?	Lesson Question What is energy?
<b>Ø</b>	Answer
Slide 2	Review: Key Concepts
	Energy is the ability to do . There are many forms of energy:
	• energy
	• energy

Energy is the ability to do

energy

energy

energy

potential energy

# Summary

## Introduction to Energy



•	potential energy
•	energy

Use this space to write any questions or thoughts about this lesson.