

Name & class: _____



Matter & Energy

Vocabulary:

1. kinetic energy: _____

2. potential energy: _____

3. conduction: _____

4. convection: _____

5. radiation: _____

What is Electrical Energy?



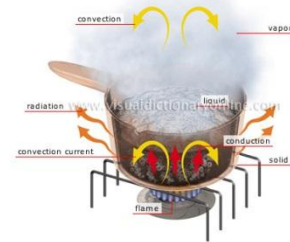
1. A battery provides _____ energy.
2. The chemical reactions in a battery produce _____, each of which carries energy.
3. When a battery is connected to a light bulb with wired, a(n) _____ is formed.
4. When electrons in a circuit pass through a light bulb, they give up some of their energy to the wire in the light bulb, called the _____.
5. The _____ measures amps, telling us how many electrons flow each second.
6. The _____ measures volts.

What Are Other Forms of Energy?

7. Energy is a measure of how much _____ something can produce.
8. Work is using _____ to move an object.

electrical	ammeter	electrons
closed circuit	filament	
forces	voltmeter	work

- 9. Energy is not a type of _____ .
- 10. Any object that is moving has _____ energy.
- 11. Stored energy is referred to as _____ energy.
- 12. The transfer of thermal energy from one object to another is _____ .
- 13. Heat always flows from _____ materials to cooler materials, never the other way.



How Does Heat Move?

- 14. In _____ , thermal energy flows through objects as their particles vibrate.
- 15. In _____ hot parts of a material rise while cooler parts sink.
- 16. Heat transferred through electromagnetic rays in _____.

conduction	potential	hotter
matter	kinetic	
heat	radiation	convection

What Materials Conduct Heat Well?

17. Metals are the best _____ of heat.

18. The molecules in _____ are packed very closely together, and this makes transferring energy easier.

Fill in the blanks

What is energy? Energy is not a type of _____. It is a measure of how much _____ something can produce. To scientists, work means using _____ --a push or pull—to move an object. There are many _____ of energy. When something moves, its energy is called _____. Another main form of energy is _____. This energy can be described as stored energy. An example of this is _____, which is the energy stored in links between atoms.

chemical energy

potential energy

kinetic energy

forms

force

work

matter

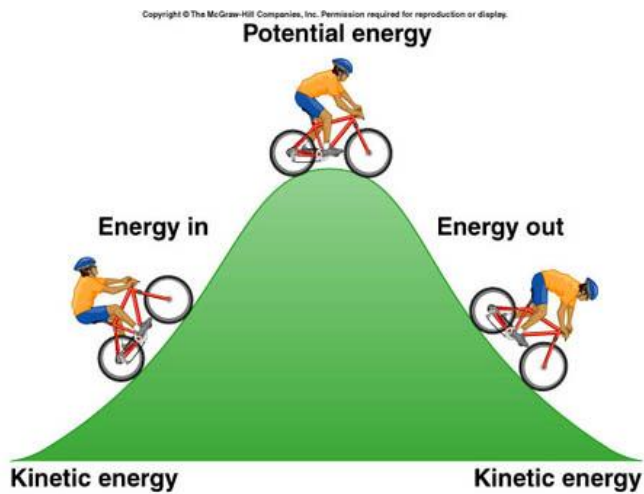
solids

conductors

Vocabulary

- _____ the ability to move matter around
- _____ when hot parts of a material rise, while cooler parts sink
- _____ the energy of a moving object
- _____ a thin wire in a bulb
- _____ energy stored in an object or material
- _____ when heat is transferred through electromagnetic rays
- _____ movement of energy from a hot object that come into contact with a cooler object; the material remains in place

	kinetic energy		potential energy
conduction		convection	radiation
	filament		energy



Correct-a-Word

potential	emulsion	mass
kinetic	volume	physical
boiling	radiation	gel

One word in each sentence below is wrong. Cross it out and write the correct word above it. One has been done for you. Use the word box to check your spelling.

mass

1. The amount of matter in an object is its ~~density~~.
2. The energy of any moving object is kindling energy.
3. The vacuum describes how much space a sample of matter takes up.
4. A gem is a solid spread through a liquid.
5. The melting point is when a substance changes from liquid to gas.
6. In a physics change, matter changes in size, shape, or state without also changing identity.
7. One liquid is spread through another in an emotion.
8. Stored energy is pretentious energy
9. The giving off of electromagnetic rays through space is radical.