

Science Topic 1 Study Guide

Name _____

energy	ability to do work or cause change
potential energy	stored energy in object
kinetic energy	energy of moving object
speed	distance an object travels in a particular amount of time
transfer	moves from one object to another
transform	changed from one kind of energy to another
collision	one object bumps into another object
heat	transfer of thermal energy from one object to another
radiation	energy that travels as a wave
light	form of energy we can see
sound	energy in the particles that vibrate as they pass through matter
wave	form of energy going out in all directions
generate	to produce
electric charge	property that causes matter to have a force
electric current	flow of charged particles

conductor	material that allows electrical current to flow through
insulator	material that does not allow electrical current to flow through
resistor	device to control flow of electricity
source	starting point
If you had objects made of metal, cloth, and plastic, you can _____ how different they feel in coldness when you touch two objects at the same time.	compare
When you touch an object with your hands, thermal energy is transferred from _____.	your hand to the object
Some objects feel cooler than others because some objects _____.	transfer thermal energy more quickly than others
If you blew up a balloon and put it in the freezer, the	Particles look like this:

particles inside the balloon would be close together.	
If you blew up a balloon and put it in the sun, the particles inside the balloon would bounce far apart from each other.	Particles look like this:
If you blew up a balloon and put it in air conditioning, the particles inside the balloon would move around.	Particles would look like this:
When thermal energy is transferred between objects, the heat moves from the warmer object to the _____.	colder object
A balloon is blown up and placed outside in the sun. As thermal energy of the particles of gas inside the balloon increase, the particles move _____ more with the sides of the balloon.	faster and collide
In a collision of two balls moving toward each other, the result will be determined by the _____.	speed of the balls.
When a golfer is putting the ball into the cup hole on the	

green, the _____ the swing of the club, the _____ the distance the ball travels.	faster greater
When objects collide, they _____ on one another and can _____ motion.	push change
To investigate energy in a collision, a rubber band was used to push a toy car into a wooden block. The more the rubber band was stretched, the _____ the car will go, the _____ kinetic energy it will have, and the _____ the block will move.	faster more farther
When a laser machines cuts a design into a material, the cut design is evidence that _____.	light transfers energy.
A _____ and a _____ show evidence of energy transfer by electric currents.	flashlight toaster
If you listen to music on your phone, energy is transferred from _____.	electrical to sound and light energy
If a container of water was surrounded by ice cubes, the	

temperature of the water would _____.	Decrease (get colder)
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