

<b>Subject</b>	<b>Science</b>
<b>Unit/Topic</b>	Heating and Cooling

Key Vocabulary	Definition
<b>Heat</b>	An energy transfer that is used to raise the average kinetic energy of the particles of a substance.
<b>Internal Energy</b>	The total kinetic energy and potential energy of the particles in an object.
<b>Temperature</b>	A measure of the average kinetic energy of particles in a substance.
<b>Conduction</b>	How well a material conducts the heat energy transfer when it is heated.
<b>Convection</b>	Internal energy is transferred from hot places to cooler places.
<b>Radiation</b>	A transfer of internal energy via waves.
<b>Insulation</b>	An insulator is a material that will not allow the easy transfer of energy.
<b>Solid</b>	A state of matter where the particles have the lowest average kinetic energy. They can vibrate in fixed positions and are touching each other.
<b>Liquid</b>	Particles can move around each other but are still touching.
<b>Gas</b>	A state of matter where the particles have the highest average kinetic energy. Particles can move freely and far apart.
<b>Freezing</b>	A change of state in which liquid becomes solid by cooling.
<b>Melting</b>	The process that occurs when a solid turns into a liquid when it is heated.
<b>Evaporation</b>	The process in which a liquid changes state and turns into a gas.
<b>Condensing</b>	Condensation is a change of state in which gas becomes liquid by cooling.