

Heat Vocabulary Unit 2

Heat Vocabulary

1. Conduction – transfer of heat through touch
2. Convection – transfer of heat through a gas or a liquid where warmer molecules rise and cooler molecules sink
3. Radiation – transfer of heat through electromagnetic waves
4. Temperature – a measure of the average kinetic energy of the particles in a substance (F/C)
5. Thermometer – a tool that measures temperature
6. Heat – the energy transferred from a warmer object to a cooler object
7. Thermal Energy – the total kinetic energy of the particles that make up a substance measured in Joules
8. Conductor – a material that allows electricity or heat to move freely
9. Insulator – a material that does not allow electricity or heat to move freely
10. Wind – caused by the uneven heating of Earth's surface or differences in air pressure

Unit 2 assignments due

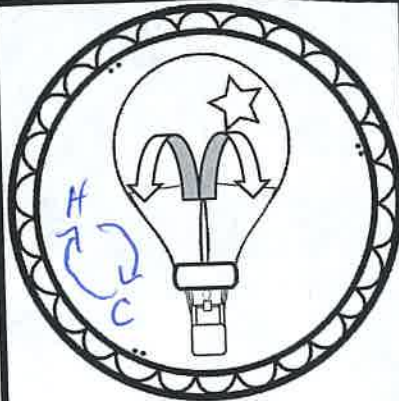
Name _____

HEAT TRANSFER



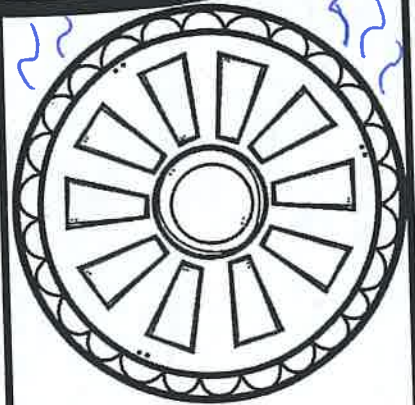
Heat moves through a Solid by conduction. The motion of particles in the hot part of the solid transfer their energy to nearby ones.

conduction Examples:
• touch a hot stove
• ironing a shirt
• ice melting in your hand



Heat moves through liquids or gases by convection. Hot fluids move upward while cooler fluids sink. Heat is transferred in a continuous convection currents

convection Examples:
• boiling water
• a steaming cup of coffee
• a radiator in a cold room



Heat can travel in the form of electromagnetic radiation. It does not require touching of molecules. The most common form is thermal or infrared radiation.

radiation Examples:
• the sun
• the heat from a campfire
• heat from a light bulb

Name: _____

Bill Nye: Heat

1. Heat is _____.
2. Heat moves in what 3 ways?
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3. Define and give an example of radiation:
4. Define and give an example of conduction:
5. Define and give an example of convection:
6. Anything with molecules has _____. The molecules in cold things are moving more _____ than the molecules of warm things.
7. How does heat conduction work in the metal brownie pan?
8. How does heat radiation work in the glass brownie pan?
9. You can measure how hot something is in _____ or _____. The _____ something is, the _____ its molecules.
10. Do freezers have heat?