Intermediate Science 7 Unit 1: Heat Study Guide For Test 2

Know the following terms

Heat Kinetic Energy Contraction Conduction

Temperature Thermal Energy Absolute Zero Convention

know the following

- Distinguish between heat and temperature.

Define temperature using the particle theory of matter.

- Define kinetic energy as the energy that particles have due to motion.
- Define temperature as a measure of the average kinetic energy of the particles of a substance.
- Define specific heat capacity.
- Define expansion and contraction.
- Use the particle theory of matter to explain expansion and contraction in the three states of matter.
- Select appropriate methods and tools in order to construct and test a thermometer .
- Compile and display data collected in the test of the design of the constructed thermometer.
- Define conduction, convection and radiation in terms of:
 - (i) particle movement
 - (ii) state(s) in which it occurs
- List common examples of the three processes of heat transfer, including:
 - (i) conduction cook ware, ice pack
 - (ii) convection air currents, heating a liquid
 - (iii) radiation fireplace, sunlight
- Provide examples of heat technologies used past and present to heat homes in Newfoundland and Labrador, including:
 - (i) wood stove
 - (ii) electric heat
 - (iii) oil furnace
 - (iv) air to air heat pump
 - (v) hot water radiation
 - (vi) geothermal
 - (vii) solar
- Provide examples of insulating technologies used today and in the past, including:
 - (i) animal fur
 - (ii) sod
 - (iii) fibreglass
 - (iv) thermos





Specific Heat

Expansion

Radiation