

Phase Changes Worksheet

Name _____

Kinetic Theory of Matter:

- Molecules are always moving. This is known as the kinetic theory of matter.
- We measure this kinetic energy with a thermometer as temperature.
- The greater the material's internal energy, the higher the temperature of that material.
- Heat is the energy flow between objects of different temperature.
- Heat and temperature are NOT the same.
- Brownian motion describes how visible particles are seen moving due to invisible molecules bumping into them.

Phases of Matter:

Solid

matter that has definite volume and shape.
The molecules are packed together tightly and move slowly.

Liquid

matter that has definite volume but not shape.
Since the molecules of a liquid are loosely packed and move with greater speed, a liquid can flow and spread.

Gas

matter that has no definite volume or shape.
Molecules of a gas are so loosely arranged and move so rapidly that they will fill their container.

Phase Change Descriptions:

Melting

the change from solid to liquid.

Freezing

the change from liquid to solid.

Vaporization

the change from liquid to gas.

Evaporation

vaporization from the surface of a liquid.

Boiling

vaporization from within as well as from the surface of a liquid.

Condensation

the change from gas to liquid.

Sublimation

the change from solid to gas.

Deposition

the change from gas to solid.