

States of Matter Study Guide

Key Vocabulary:

Matter - anything that has mass and takes up space.

Mass - the amount of matter that something contains.

Volume - the amount of space that matter takes up.

Density - the amount of matter in a given space.

Solid - a state of matter that has a definite shape and a definite volume.

Liquid - a state of matter that has a definite volume but no definite shape.

Gas - a state of matter with no definite shape and no definite volume.

Boiling Point - the temperature at which a liquid changes into a gas.

Melting Point - the temperature at which a solid changes into a liquid.

Freezing Point - the temperature at which a liquid changes into a solid.

Sublimation - the process where a solid changes directly into a gas.

Chemical Property - a characteristic of matter that describes how it
changes when it reacts with other matter. (burning)

Physical Property - a quality of matter that can be measured or observed
with the senses without changing the matter into
a different kind of matter.

Extended Responses:

The students will be required to explain how a glass of soda with ice is an example of the three basic states of matter.

The students will be required to describe the part heat energy plays in changing states of matter from solid to liquid to gas and back to liquid and solid.

When heat is added to a solid the molecules move farther apart causing it to change into a liquid (melting).