Q) What is happening to the molecules of a substance when a solid changes phase into a liquid?

A) The molecular bonds are breaking.

Q) In what phase do molecules vibrate the most?

A) In the Gas phase.

Q) During a phase change heat energy is constantly applied and the temperature of a substance _____.

A) Remains the same.

Q) When heating a substance and it reaches a phase change, the temperature remains the same and the heat energy _____.

(increases/decreases/remains the same)

A) It increases.

Q) What is heat energy used for during a phase change such as melting?

A) It is used to break the molecular bonds.

Q) What happens to the temperature of a substance during a phase change?

A) It remains the same.

Q) Why is the boiling point of a substance a characteristic property?

A) Because each liquid boils at a different temperature.

Q) Name the phases of matter.

A) solid, liquid, gas

Q) What state is a substance in when it undergoes the boiling phase change?

A) Both liquid and gas.

Q) At the beginning of a phase change from solid to liquid, is there more solid than liquid? Why?

A) Yes, because the phase change is just starting and it takes time for the solid to change into a liquid.

Q) Condensation is a phase change from _____ to _____.

A) Gas to liquid.

Q) During condensation is heat energy lost or gained?

A) Heat energy is lost.

Q) During melting is heat energy lost or gained?

A) Heat energy is gained.

Q) During boiling does temperature change?

A) No, temperature does not change.

Q) How do you know that a phase change is taking place?

A) The temperature remains the same (the substance can be observed as it changes its appearance too).

Phase change questions for use on cards

(Depending on the scenario, consider allowing students to write their own question cards)