

Changing States of Water

Note-taking Guide - Answer Key

*boiling, removing, less, freezing, cool, melting slow, evaporation,
freezes, water vapor, heat, loses, farther, condensation, quickly, move*

In winters, the heat from the Sun is much less than in summers. The liquid water loses heat and freezes to solid ice.

Heat energy causes the tightly packed particles of matter to move quickly.

This causes the solid ice to change into liquid water. This change in state is called melting.

Adding heat energy to liquids causes the particles of matter to move farther apart and more quickly.

When the water starts boiling, liquid water changes to water vapor or water in the form of a gas. This change in state is called evaporation.

Place a cool lid over this hot bowl.

When the water vapor touches the cool lid, it loses heat energy.

This causes the particles that make up matter to slow down. The water vapor then changes into liquid water.

Removing heat from liquid water causes the particles to slow down further and move closer together. The liquid water changes into solid ice.

The process by which water vapor changes to liquid water is called condensation.

The process by which liquid water changes to solid ice is called freezing.