

Alder Coppice Primary School — Knowledge Organiser

Subject: Science

Year: 4

Unit 2: Solids, Liquids and Gases

Links to: Y2 Materials

What I Should Already Know:

That objects are made from materials and that these can be different, i.e. a table is an object, made from the material *wood*.

Materials can be solids, liquids or gases.

Subject Vocabulary:

Fair test

Constant

Variable

Hypothesis

Skills & Enquiry:

- What are solids, liquids and gases and why do they behave as they do?
- Do all matters change at the same temperature?
- Can we change how quickly liquids evaporate?

Unit Specific Vocabulary:

matter - Objects that take up space and have a mass are called matter. Everything around you is made up of matter.

solid - a solid (generally) holds its shape and has a fixed volume.

liquid - a liquid fills up the shape of the bottom of a container. It forms a pool and also has a fixed volume.

gas - a gas can escape from an unsealed container. It fills up the space that it is in and does not have a fixed volume.

evaporation - Changing from a liquid to a gas.

condensation - Changing from a gas to a liquid

precipitation – rain, snow, hail or sleet that follows after condensation

temperature - Degree or intensity of heat present in a substance or object and shown by a thermometer or felt by touch.

Celsius - a scale of temperature on which water freezes at 0 degrees and boils at 100 degrees under standard conditions.

reversible - Capable of being reversed so that the previous state is restored.

irreversible - Not able to be undone or altered - a chemical change has occurred.

What I should know by the end of the Unit:

- That solids, liquids and gases are different types of matter.
- That the particles inside solids, liquids and gases behave differently.
- That some solids, liquids and gases can be changed by heating and cooling.
- That some changes are reversible and some are irreversible.
- That changes of state take place in the water cycle.
- That evaporation takes place at different speeds.

Key Facts:

STATES OF MATTER



THE WATER CYCLE

