# Year 4 – States of matter

### **Knowledge**

- To know if an object is a solid, liquid or gases.
- To know the difference between solids, liquids and gases.
- To know that some materials change state when heated.
- To know the part played by evaporation and condensation in the water cycle.

### <u>Skills</u>

 identifying differences, similarities or changes related to simple scientific ideas and processes

This could be achieved by observing different materials to discover whether it is a solid, liquid or gas and how they change state. (Observations)

making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers

Use observations to identify the differences in the properties of solids, liquids and gases. Investigate at which temperature the material changes state e.g. ice cubes/ chocolate/ cheese. They might observe and record evaporation over a period of time, for example, a puddle in the playground or a washing line, and investigate the effect of temperature on washing or drying or a snowman melting. (Comparative testing and Observing over time)

#### recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables

Use drawings and labelled diagrams to explain the part played by evaporation and condensation in the water cycle. (Research)

Vocabulary	
Temperature Celsius Compressibility Soluble Dissolve Humidity Condensation Evaporation Precipitation Weight	Mass Vapour Solid Liquid Gas Matter Mixture Climate pressure

# **Preload**

 Properties and changes of materials (Y5) - When discussing the water cycle, explain that the changes of state that occur can be classed as reversible changes.