

Science Overview – States of Matter

Year 3/4 Cycle A

Summer 2

Key Question: What makes this place unique?

National Curriculum

- Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.
- compare and group materials together, according to whether they are solids, liquids or gases.
- observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C).

SUBSTANTIVE KNOWLEDGE

- Describe the three states of matter (including the nature of the particles in each).
- Know the properties of each state of matter.
- Group and classify materials based on their state of matter.
- Know that states of matter can change when they reach a certain temperature.
- Know that these temperatures are called the boiling, melting and freezing points.
- Describe the water cycle and that condensation and evaporation occur within the water cycle.

Key words:

particles
evaporate
condense

Vocabulary:

states of matter, solids, liquids, gases, water vapour, melt, freeze, precipitation

working scientifically

- Take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.

Enquiry type to cover and enquiry question

Comparative test (enquiry type)

Which take away cup is best for keeping our hot chocolate warm?

Learning Milestones /Assessment

I can...

- Sort materials into solids, liquids and gases.
- Describe the properties of solids, liquids and gases.
- Identify whether heating or cooling is required to change the state of matter.
- Label the key parts of the water cycle.