

Science- Year 4

Spring 1- In a State

In Science, I have learnt:

About different types of materials and how to describe and sort them based on their properties.

To carry out a fair test:

- I can predict what I think will happen and say why using my prior knowledge.
- I can explain what we are changing, measuring and keeping the same in the experiment.
- My conclusion contains detailed observations and explains my results.

I can compare and group materials together, according to whether they are solids, liquids or gases.

I can 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).

I can identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.

Working Scientifically

I can sort materials into solids and liquids and use my results to draw conclusions about the properties of these.

I am beginning to design my own experiments to solve a problem:

- My prediction says what I think will happen and why. I have used a range of scientific vocabulary and drawn on my prior experiences, including previous experiments in this topic.
- I can identify what needs to be changed, stay the same and measured if it is a fair test experiment.
- I can record my results in a table. I can draw a bar chart in the ice melting experiment.
- I can draw a conclusion based on my results and say whether this supports my prediction.
- I can say what I would do differently if I repeated the experiment.

I can use a data logger to take accurate readings during an experiment. I can use these readings, and the graph created, to draw conclusions.

Scientific enquiry type:

Grouping and classifying

Carrying out a fair test

Observation over time

New Science words:

Solid, liquid, gas, hard, soft, pour, flow, runny, viscous, sticky, temperature, cool, cooling, warm, warming, hot, degree Celsius, melt, **melting, freeze, **freezing**, solidify, **solidifying**, heating, states of matter, **change of state**, **melting point**, **freezing point**, process, **evaporate**, **evaporation**, **water vapour**, boil, boiling, **boiling point**, steam, thermometer, sensor, droplets, **condense**, condensation, question, investigation, fair test, change, measure, predict, prediction, explanation, observations, draw conclusions, data logger.**

