

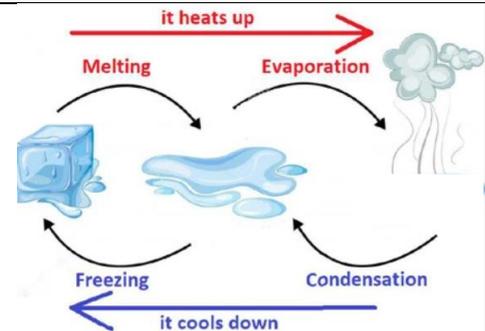


Science- Year 5

Autumn 1– Marvellous Mixtures

In Science, I have learnt:

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



solid, liquid, ice, melt, melting, freeze, freezing, solidify, solidifying, heating, states of matter, change of state, melting point, freezing point, process, gas, volume, evaporate, evaporation, water vapour, boil, boiling, boiling point, steam, thermometer, condense, condensation.

I can compare and group together everyday materials on the basis of their properties, including their: hardness, solubility, conductivity (electrical and thermal), and response to magnets.

I know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution.

I can use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.

I can explore reversible changes, including evaporating, filtering, sieving, melting and dissolving.

Working Scientifically

I can 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 select appropriate equipment to use considering accuracy and precision.**
- **I can identify if the experiment is a 'fair test' experiment. If so, I can identify what needs to be changed, stay the same and measured.**
- **I can record my results in a table.**
- **I can draw a conclusion based on my results and say whether this supports my prediction.**
- **I can evaluate my experiment and suggest improvements.**

I can apply what I have learnt so far in the topic to set up a comparative test, considering how best to test a range of factors e.g. whether a plate is a good thermal insulator.

Scientific enquiry type:

Grouping and classifying

Observation over time

Carrying out a fair test

Finding things out using secondary sources of information

New Science words:

material, compare, contrast, separate, mixture, sieve, **filter**, **evaporate**, **solid**, **liquid**, **gas**, **change of state**, powder, particle, dissolve, **soluble**, **solution**, **solute**, **suspension**, **saturated**, **reversible**, **non-reversible**, variable, contamination, microbes, bacteria, contaminated, impurity, pure, **purity**, properties, strength, weakness, **durability**, wear, tear, stretch, flexibility, weight, mass, plastic properties, group, organise, criteria, hardness, waterproof, washable, stain resistant, reusable, ovenproof, heat, temperature, **thermal conductor**, **thermal insulator**, manufacture.