

Y6 Science – Materials

Knowledge

- 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 give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic
- I can demonstrate that dissolving, mixing and changes of state are reversible changes
- I can explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.



Cross Curricular links/Past knowledge

Science

Y5 – comparing materials according to their properties. Sorting and grouping materials.

Y4 – observing changes in materials – heating, cooling, evaporation, condensation,

Y2 – How shapes of materials can be changed e.g. bending

Vocab

Properties, hardness, solubility, solution, transparency, electrical conductor/insulator, thermal conductor/insulator, magnetic, nonmagnetic, dissolve, separate, solids, liquid, gases, reversible, irreversible, burning, rusting, filtering, evaporation, sieving, permeable, flexible, flammable, translucent, opaque, material, compare

Working Scientifically

- I can set up a fair test for separating materials and plan the details in other types of enquiries about materials.
- I can ask questions and offer my own ideas for scientific enquiry which have a clear purpose.
- I can identify appropriate approaches to answering a scientific question.
- I can use a wide range of equipment correctly and safely when separating materials and can deal with equipment failures independently.