

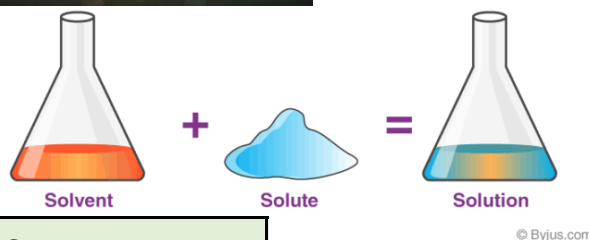
Bradfield CE Primary School - Knowledge Organiser - 2023/24



Science:
Materials and their properties

Year 5

Spring Term



Key Facts

- Materials can be grouped based on their properties, including their hardness, solubility, transparency, conductivity, and response to magnets.
- Some materials will dissolve in liquid to form a solution.
- When a solution is left to evaporate, the solid can be obtained back through crystallisation.
- Mixtures can be separated through filtering and sieving.
- Dissolving, mixing and changes of state are all reversible changes.
- Some changes can form new materials, this kind of change is not usually reversible.



Key Vocabulary

Material	the matter from which a thing is or can be made.
Dissolve	when a substance mixes in with a liquid to make a transparent liquid (it might look like it has disappeared).
Insoluble	a substance which cannot be dissolved.
Soluble	a substance which can be dissolved.
Insulator	a substance or device which does not readily conduct electricity .
Conductor	an object or type of material that allows the flow of electricity.
Chemical	a substance which has been artificially prepared.
Irreversible	cannot be undone or altered.
Reversible	capable of being reversed so that the previous state or situation is restored.
Solution	a solution is made when a substance (solute) dissolves into a liquid (solvent).
Separate	divide into its different parts or elements.
Mixture	a substance made by mixing other substances together.
Transparent	allows light to pass through so objects behind can be seen clearly.
Flexible	can bend easily without breaking
Permeable	a material that allows liquids or gases to pass through it
Magnetic	capable of being attracted to a magnet.
Substance	the material used to make something

Reversible and Irreversible Changes



Threshold Concept

Materials	the matter from which a thing is or can be made
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