



Year 5

Significant Scientists		
Spencer Silver (1941-1921)		An American scientist who created post-it notes in 1974 and specialised in adhesives.
Marie Curie (1867-1934)		Marie Curie discovered radioactivity and led pioneering research on X-Rays.

Mixture Substances are mixed together but dissolving hasn't taken place. For example, mixing fruits together.	Solution When substances dissolve in a liquid. For example, when sugar dissolves in water.
Mixtures can be separated by filtering and/or sieving. Filtering - separating solids from liquids. Sieving - sorting big bits from small bits.	Solutions can be separated through evaporation. Evaporation - A liquid evaporates into a gas when heated. This removes the liquid.

Science

Properties and changes of Materials

Key Vocabulary and Phrases

Properties	The specific qualities of an object.
Dissolve	A solid that completely mixes with a liquid and cannot be seen.
Evaporation	When a liquid turns to gas due to temperature.
Separating	Moving things apart,
Soluble	Solids and gases that dissolve in liquids.
Insoluble	Solids that do not dissolve in liquids.
Solution	A mixture of a liquid with a dissolved gas or solid.
Reversible Change	Changes that are not permanent and can be switched back.
Irreversible Change	Permanent changes that cannot be changed.

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Science

Properties and Changes of Materials

Properties of Materials

Hard - Difficult to scratch. (Metal spoon)	Soft - Malleable (easily shaped) (Clay)	Soluble - Can be dissolved. (Sugar)
Insoluble - Cannot be dissolved. (Rocks)	Transparent - Lets light through. (Glass)	Opaque - Will not let any light through. (Brick)
Electrical Conductor - Lets electricity pass through. (Copper Wire)	Thermal Conductor - Lets heat pass through. (Metal saucepan)	Magnetic - Is attracted to a magnet. (Steel paperclips)
Not magnetic - Not attracted to magnets. (Wooden spoon)	Thermal Insulator - Does not let heat pass through.	Electrical Insulator - Does not let electric pass through. (Wooden handle)

Separating Mixtures - Evaporation



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Reversible and Irreversible Change

Reversible Change	A change that is not permanent. For example, water can be turned to ice when frozen. The ice can be heated to make water again.
Irreversible Change	A permanent change. It can cause new material to be formed and is usually caused by heat. For example, making a cake. The original ingredients cannot be restored after they are mixed together,

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Questions	What? Why? Where? When? How?
Record	Classification keys, scientific diagrams, bar charts and line graphs.
Diagram	A labelled picture.
Classify, sort and group	Organise materials by their features.
Compare and contrast	Look and similarities and differences of different objects.
Variable	Something you can change or adapt in your investigation/experiment.
Reporting and presenting findings.	Giving reasons, explaining relationships, and explaining results

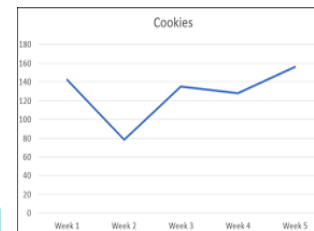
Science - Working Scientifically

Things You Could Investigate:

- What materials will keep my drink warmer for longer?
- Observe and compare changes when materials are mixed.
- Compare and group materials.

Recording your findings

Line Graph



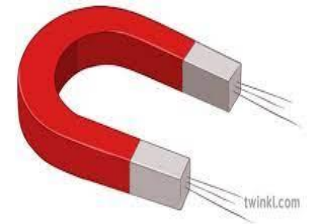
	Shapes with curved lines	Shapes with straight lines
Pink shapes		
Blue shapes		

Carrol Diagram

Properties and Changes of Materials

Equipment

Magnets



Filter Paper



Sieve



Circuit

