

Science- Materials (changes) - Year 5

Prior Learning:

- Y1 - know what a material is made from and its properties.
- Y2 - compare suitability of materials. Change solids shapes.
- Y4 - solid, liquid and gases. Observe changes in state. Understand water cycle.

Key Vocabulary

Change of state	Substance changing from solid to liquid, liquid to gas or vice versa
Mixture	Substance made by mixing other substances together
Reversible change	A change that can be undone or reversed
Irreversible change	A change that cannot be undone or reversed
Burning	Production of smoke, flames and ash from combustion of e.g. coal/wood
Rusting	Reaction of iron, oxygen and water to form coating
New material	New substance formed during irreversible change
Chemical change	Any change that causes a new substance to be formed

Chemist/
pharmacist

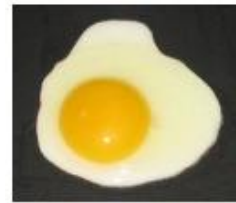


Health professionals who deal with the composition and effects of medicines.

Irreversible Changes

What is an irreversible change?

An irreversible change is a permanent change that cannot be undone.



Cooking
eggs by
frying,
boiling,
scrambling,
poaching

etc. is always an **irreversible** change.

Any **reaction** such as burning that causes new **substances** to be formed is called a **CHEMICAL CHANGE** the changes are **irreversible**.



Fuel + Oxygen + Flame



Ash + Smoke + Heat

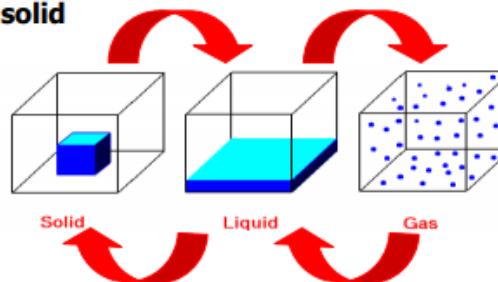
Dissolving
sugar in
water is a
reversible
change.



When the water is **evaporated** it leaves the sugar behind.

Changing state from solid to liquid to gas and back again is a reversible change.

PHYSICAL CHANGE



Can I answer:

- What is difference between a reversible and irreversible change?
- What are the 3 reversible changes??
- What is created during an irreversible change?