



Roby Park Primary School Year 5

Chemistry

Types of Change



What we already know:

- ✓ A variety of everyday materials including wood, plastic, glass, metal, water and rock.
- ✓ The physical properties of a variety of everyday materials (including those that are transparent) and to compare and group materials on the basis of these properties
- ✓ How materials are suitably used based on their properties.
- ✓ How magnets and electrical circuits work.
- ✓ Some materials which are magnetic.
- ✓ How shapes of solid objects can be changed by squashing, bending, twisting and stretching.
- ✓ Materials that are solids, liquids and gases and their particle structure.
- ✓ Some materials change state when they are heated or cooled and the temperature at which this happens.
- ✓ The roles of melting, evaporation and condensation in the water cycle and the role temperature has on the rate of evaporation.
- ✓ Some rocks are permeable.

We are learning to;

- Demonstrate that dissolving, mixing and changes of state are reversible changes
- 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.





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Key Vocabulary

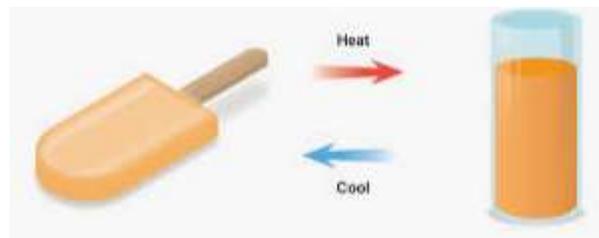
State – the structure or condition of something.

liquid in a form that flows easily and is neither a solid nor a gas.

Solid- having a firm shape or form that can be measured in length, width, and height; not like a liquid or a gas.

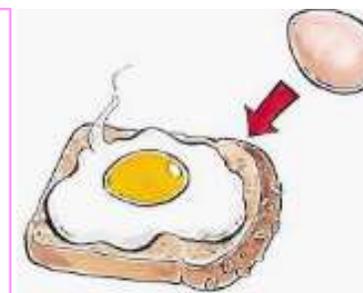
Reversible – can be taken back to its original state.

The Power of Five



A reversible change is a chemical change where no new materials are created and the original material can be recovered. Examples include freezing water to make ice or melting chocolate.

Irreversible changes. A change is called irreversible if it cannot be changed back again. In an irreversible change, new materials are always formed. Example: heating bread to make toast.



Three states of matter:

SOLID: particles close together / vibrate around a fixed position

LIQUID: particles close but randomly arranged / move around

GAS: particles far apart and randomly arranged / move around

Investigate!

How can we make a meal from a mixture?

Separate a mixture by order of ingredients and techniques.

Exploring reversible and irreversible changes

Plan and carry out a fair test.





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5Ws

What is an irreversible change?

What type of change will burning produce?

Which process causes a solid to melt?

What are the 3 states of matter?

When solid particles mix with solid particles this is called...

3 2 1

List 3 irreversible changes

.....
.....
.....

List 2 reversible changes

.....
.....

Recall 1 fact about freezing

.....



List 5 types of change



VOCABULARY UNSCRAMBLE

e i l n i s a o u l

Impossible to dissolve, esp. in a given liquid. insulator

d i l l i u q

A substance that flows easily and is neither a solid nor a gas

d s l i o -

having a firm shape or form

Speedy Pencil. Write as much as you can remember in 5 minutes



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