



**What should I already know?**

- Compare and group materials together, according to whether they are solids, liquids or gases.
- Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C).
- Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.
- Solids, liquids and gases can be identified by their observable properties.
- Solids have a fixed size and shape (the size and shape can be changed but it remains the same after the action).
- Liquids can pour and take the shape of the container in which they are put.
- Liquids form a pool not a pile.
- Solids in the form of powders can pour as if they were liquids but make a pile not a pool.
- Gases fill the container in which they are put.
- Gases escape from an unsealed container.
- Gases can be made smaller by squeezing/pressure.
- Liquids and gases can flow.

**Knowledge**

- 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.

**Year 5– Summer 2 Term – Properties and Changes of Materials – Irreversible Changes**  
**Intention: In Science, I will be...**

**Scientific Skills**

- Observing and comparing the changes that take place, for example, when burning different materials or baking bread or cakes.
- Researching and discussing how chemical changes have an impact on our lives, for example cooking.
- Discuss [research] the creative use of new materials such as polymers, super-sticky and super-thin materials.

**Vocabulary**

Materials	Formation
Irreversible	Chemical changes
Polymers	Sticky
Thin	

