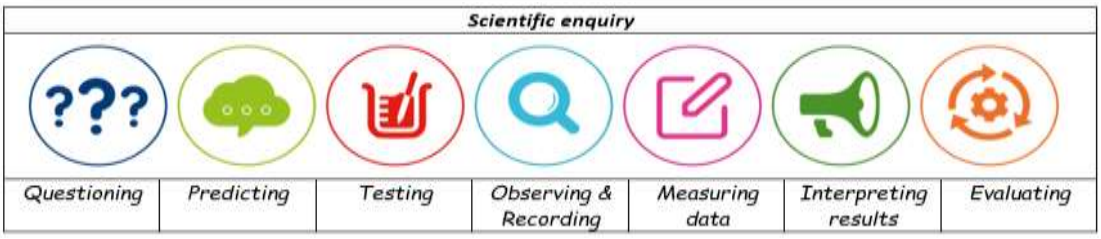
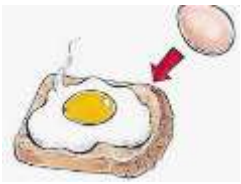
# In **science** we are learning about…

# Properties and changes in materials

## Key vocabulary

- **Properties-** the qualities and characteristics that describe and identify something.
- **Soluble-** it can be dissolved in liquid. This means the particles are broken down to become so tiny we can no longer see them
- **thermal-**relating to or caused by heat or by changes in temperature
- **dissolve-**mixed with the water to make a transparent (see-through) liquid called a solution
- **solution-**a mixture of two or more substances
- **separating-**a method that changes a mixture into two or more distinct mixtures
- **mixing-** to stir, shake or combine them in some other way to make one thing
- **filtering-** to remove something unwanted
- **Sieving-** to separate finer particles from coarser ones or solids from liquids
- **reversible change-**a change that can be undone or reversed
- **burning-**a process in which a substance reacts with oxygen to give heat and light
- **rusting-** a form of corrosion caused by a chemical reaction
- **reactions-** when substances are changed to one or more different substances.
- **irreversible change-** when materials cannot be changed back to how they were before



## Sticky knowledge

- I can explain irreversible changes, provide examples, and understand they cannot be reversed.
- I can explain reversible changes, provide examples, and understand they can be reversed.
- I know mixtures can be separated using methods like filtering, sieving, and evaporation.
- I understand that mixing substances can result in irreversible changes.
- I recognise that materials have various properties like conductivity and transparency, which determine their suitability for specific purposes.

## Links to previous learning

- To be able to describe the simple physical properties of a variety of everyday materials.
- To compare and group together materials on the basis of their simple physical properties.
- To observe that some materials change state when they are heated or cooled.
- To identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.

## Aspirations

- Pharmacist
- Chef
- Chemical engineer

## Our characteristics

- Questioning
- Concentration
- Making links