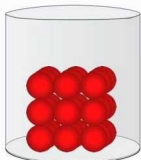




Year 4 Recap—States of Matter

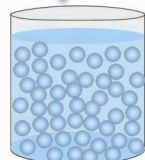
solid



- rigid
- fixed shape
- fixed volume

cannot be squashed

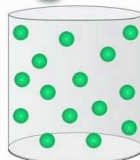
liquid



- not rigid
- no fixed shape
- fixed volume

cannot be squashed

gas



- not rigid
- no fixed shape
- no fixed volume

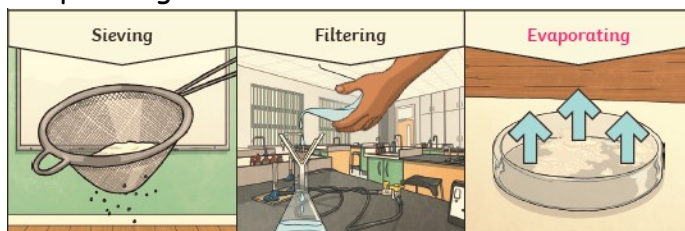
can be squashed

- Everything around us is either a **solid, liquid or a gas**. These are called the three **states of matter**.
- Some materials can change from one state to another and back again by heating them up or cooling them down.
- Everything is made of tiny bits, called **particles**.
- In a solid, the particles are stuck closely together, which is why solids tend to be hard or more rigid.
- In a liquid, the particles are close together, but can move around easily which is why liquids tend to be runny.
- In a gas, the particles are really spread out and can

Reversible and Irreversible

When we mix, dissolve or change the temperature of some things they will change.

- Some of these changes are **reversible**. For example, sand mixed with stones can be reversed by using a sieve; salt added to water can be reversed by evaporating the water.



- Some changes are irreversible. For example once the ingredients of a cake have been mixed and baked, there is no way to get them back. They will stay as a cake forever (or as long as it takes to eat the cake!).

Key Vocabulary

Properties	A way to describe something
Material	The 'stuff' an object is made out of
Particle	The smallest part or building block of a
Conductor	A material that heat or electricity can easily travel through.
Insulator	A material that doesn't let heat or electricity
Transparency	A transparent object will let light through. It
Soluble	A solution is made when solid particles are mixed with a liquid. Solids that dissolve are

What I can do at home

Investigate	Look around your home. What things can you find that are soluble in water? These will dissolve when you add them into water.
Explore	Most meals that we make involve irreversible change. We cannot return an egg to its runny state once we have fried it. Are there any meals which

Communicate

Talk to an adult at home about the things below. You don't need to record this.

What is the most important property that something can have?

What is the most important description that a person can have?