# **Knowledge Organiser**

### <u>Year 5</u> <u>Properties of Materials</u>

#### **VOCABULARY**

Solid- Firm shape or form that can be measured in length, width, and height not like a liquid of gas. Tightly packed molecules.

Liquid- no defined shape, takes the shape of its container. Particles free to move over each other.

Gas- easy to compress, expand to fill containers and occupy more space than liquids or solids.

transparent- You can see through it

Soluble- able to be dissolved

insoluble- cannot be dissolved.

Conductor- a substance that heat or electricity can pass along or through.

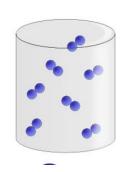
Filtering- a device used to remove dirt or other solids from liquids or gasses.

Evaporation- turn liquid into a gas; pass away in the form of vapour.

Condensation - small drops of water which form when water vapour or steam touches a cold surface.

Reversible- can be changed back e.g. ice to water.

#### States of Matter







Spencer Silver invented the 'Post It Note' by mistake.

Gas- particles move freely and expand to fill container.

**Liquid-** no defined shape, takes the shape of its container.

**Solid-** firm shape with tightly packed molecules.

#### **Electrical conductors**

#### Grouping Materials based on properties.

# Soluble Insc



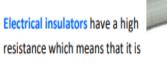




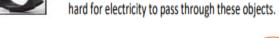
Permeable



Electrical conductors allow electricity to pass through them easily while electrical insulators do not.





















Copper Conducto

# Plymouth Science

#### **Processes**



# <u>Year 5</u> <u>Properties of Materials</u>

## Dissolving

Two substances becoming one solution.



### Melting

Changes state but does not mix.



#### **Irreversible Changes**

Often result in a new product being made from the old material.

For example burning wood produces ash



#### **Reversible Changes**

You can change it back to its original state.

