














# Pye Bank CE Primary DSAT Knowledge Organiser

YEAR 1









CHEMISTRY: What are things made from?

SCIENCE

## KEY VOCABULARY

-  **Object:** a thing that can be used e.g. a pencil, door, a car
-  **Material:** something that an object is made of e.g. wood, plastic
-  **Hard:** it is not easily broken or bent
-  **Soft:** it is easy to change the shape of
-  **Rough:** it looks or feels bumpy or uneven
-  **Smooth:** it has no lumps or bumps
-  **Bendy:** it can be folded easily
-  **Stretchy:** it can be pulled and made longer or wider
-  **Waterproof:** it keeps water out and keeps things dry
-  **Not waterproof:** it lets water in and does not keep things dry
-  **Absorbent:** it soaks up water
-  **Not absorbent:** it does not soak up water
-  **Transparent:** you can see through it
-  **Opaque:** you cannot see through it

## KEY CONCEPT – there are many different materials in the world that we use

wood 	water 
plastic 	stone 
glass 	fabric 
metal 	paper 

These are just some of the materials that we use.










Materials are used to make objects.

Objects can then be used for different purposes. For example, a chair is made out of wood so that it is strong enough to sit on.

## STICKY KNOWLEDGE

1. Natural materials come from our environment.
2. Manufactured materials come from natural materials but have been changed by humans
3. Synthetic materials are made by humans
4. We use the materials most suitable for a job eg –an umbrella must be made from a waterproof material
5. Some materials have multiple uses.eg, metals can be used in coins, cans and cars.
6. Objects can be changed by the effect of forces – they bend, squash, twist and stretch.

## KEY CONCEPT –materials are chosen by the suitability of their properties

<b>hard</b> not easily broken or pierced  A hard diamond.	<b>squashy</b> easily crushed or squeezed  The play dough is squashy.	<b>smooth</b> an even and regular surface  Some smooth pebbles.
<b>absorbent</b> able to soak up liquid  The sponge is absorbent.	<b>bumpy</b> uneven, raised patches  This shell is bumpy.	<b>opaque</b> cannot be seen through  She is hidden by the opaque screen.
<b>dull</b> lacking shine or brightness  The moth's wings are dull.	<b>brittle</b> hard, but may break easily  The glass is brittle.	<b>translucent</b> allowing some light to pass through  The screen is translucent.

- Glass can be used to make windows because it is **transparent**.
- Rulers can be made from **wood, plastic** or rubber because these materials are **smooth** and can be cut straight.
- Spoons are made from **metal**, because it is waterproof and can be cleaned easily.
- They can also be made from **plastic** for children because **plastic** is light and it cannot hurt children's growing teeth.

## KEY CONCEPT – Some materials can be shaped

The shape of some solid objects can be changed depending on what material they are made from.

### Squashing, Bending, Twisting and Stretching

