

#### Year 2 Autumn 1

## Knowledge Organiser Science: Everyday Materials



#### What does 'material' mean?

All objects have a name such as 'table' or 'door'. All objects are made from a material. A material is the 'stuff' that the object is made from. A Table is made from wood.

Key Vocab	
Properties	Ways to describe something
Material	The 'stuff' an object is made out of
Rubber	A tough material that can be shaped
Inflatable	Can be filled with air
Fabric	Cloth produced by weaving or knitting
Flexible	Easily bent without breaking
Absorbent	Able to soak up liquid or moisture
Waterproof	Not letting water through; not absorbent
Reflective	A reflective surface is one that can bounce back light
Magnetic	Magnetic materials are rocks or pieces of metal that can pull certain types of metal toward itself

## Changing the shape of materials

Squashing



Crushing something so that it becomes flat, soft or out of shape

Bending



Changing a straight object so that it is curved

**Twisting** 



Changing the shape of an object by turning it

Stretching



Made longer or wider without tearing or breaking

#### Some common materials, their properties and uses

Wood



Rigid, strong, hard Can be used for doors, floors, tables, fences

**Plastic** 



Strong, shiny, bendy Can be used for bottles, pens, rulers, toys, phones, cups, packaging

Glass



Transparent, smooth, stiff, waterproof Can be used for windows, mirrors, glasses, windscreens

Rock



Hard, strong, dull Can be used for garden walls. old buildings

Rubber



Flexible, stretchy, strong

Can be used for tyres, elastic bands, balloons, soles on shoes

Brick

rough

Rigid, strong, dull,

Can be used for houses, walls





### Some objects can be made from various materials

### Spoons

A spoon can be made from plastic, metal or wood





### **Shoes**

A shoe can be made from leather, fabric or rubber







#### Gloves

A gloves can be made from leather, wool or rubber







## Cups

A cup can be made from plastic, paper or glass







# John Boyd Dunlop

John Boyd Dunlop was a Scottish inventor. He is best known for his work in developing the first pneumatic (inflatable) tyre, a device still used today.



Dunlop found that solid wood, rubber or iron wheels made cycling difficult on the bumpy and rough roads. He experimented by using an inflatable rubber tyre on his son's tricycle.

In 1889, cyclist Willie Hume tested Dunlop's tyres by taking part in several races in the UK. He was the first member of the public to buy a bicycle with pneumatic tyres.

