

Everyday Materials-Year 2

Key Vocabulary-	
Material	A substance used to make things
Property	A characteristic of something
Transparent	Objects behind can be seen clearly.
Translucent	A material which allows light to pass through but is not clear.
Opaque	A material which does not allow light to pass.

Types of materials-

Properties of different materials-	
Wood	strong, opaque, stiff, hard
Plastic	bendy, smooth, translucent, stretchy
Glass	transparent, hard, smooth, waterproof
Brick	rough, strong, opaque, dull
Paper	Translucent, flexible, not waterproof
Cardboard	rough, dull, opaque, not waterproof
Metal	Shiny, strong, opaque, hard
Rock	Rough, strong, opaque, hard

People we need to know-	
John Dunlop	<ul style="list-style-type: none"> • Born in 1840 • An expert in rubber • Invented the first inflatable tyre
Charles Macintosh	<ul style="list-style-type: none"> • Born in 1766 • Invented the first waterproof fabric • The 'mac' raincoat is named after him
John McAdam	<ul style="list-style-type: none"> • Born in 1756 • He invented building roads with a smooth, hard surface.

What we already know:

We can already name and identify materials including: wood, plastic, glass, metal, water and rock.

We can describe simple physical properties of a variety of everyday materials using vocabulary such as wet, liquid, solid, gloopy, hard, stretchy, stiff, shiny, dull, bendy, not bendy, waterproof, not waterproof, absorbent, non-absorbent, opaque, transparent, bumpy and spiky.

Finally, we are able to group a variety of materials based on their physical properties.

What we will know by the end of this unit:

- ✓ We will be able to *identify and compare* the suitability of a variety of materials for particular uses.
- ✓ We will know the materials: wood, metal, plastic, glass, brick, rock, paper, cardboard.
- ✓ We will *perform simple tests* to learn how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.
- ✓ We will *use our observations and ideas* to suggest answers to questions.
- ✓ We will look at people who have developed new materials, such as Dunlop, McAdams and Mackintosh.

Everyday materials-	
The suitability and uses of everyday materials	<p>We use different materials for different objects depending on their purpose.</p> <p>Materials are used for more than one thing (e.g. metal can be used for coins, cans, cars and table legs).</p>
How the shape of solid materials can be changed .	<p>Changing the shape of a material can be done by:</p> <p>Squashing is to crush something so that it becomes flat, soft, or out of shape.</p> <p>Bending is to change a straight object so that it is curved.</p> <p>Twisting is to change the shape of an object by turning it.</p> <p>Stretching is to make an object longer or wider without tearing or breaking.</p>