

Year 2 Knowledge Organiser Science: Everyday Materials



ALL SAINTS
MULTI ACADEMY TRUST
BIRMINGHAM
GOD'S LOVE IN ACTION

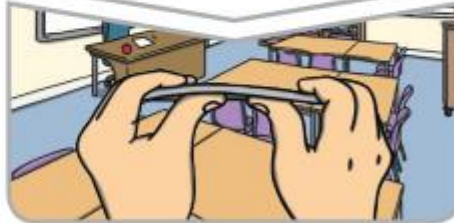
Key Vocabulary

Materials	Materials are what objects are from.
Suitability	Suitability means having the properties which are right for a specific purpose.
Properties	This is what a material is like and how it behaves (soft, stretchy, waterproof),

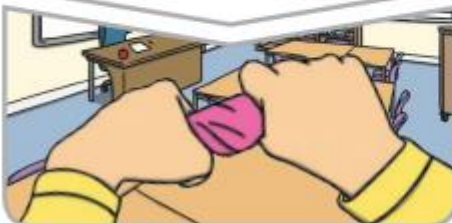
Squash an object by pushing both hands together.



Bend an object by grabbing both ends of the object and bringing the ends inwards together.



Twist an object by turning your hands in opposite directions.



Stretch an object by pulling your hands slowly and gently apart.



What do I already know?

Some materials are opaque and transparent. Transparent is when you can see through the material and opaque is when you can not.

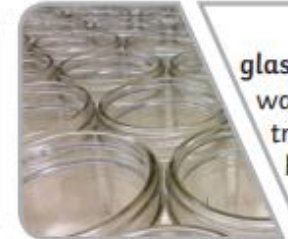
Windows are often made out of a glass material. They can often be both transparent and opaque,

Key Knowledge

Properties of Materials



wood:
hard, stiff, strong, opaque, can be carved into any shape.



glass:
waterproof, transparent, hard, smooth.



plastic:
waterproof, strong, can be made to be flexible or stiff, smooth or rough.



metal:
strong, hard, easy to wash.



paper:
lightweight, flexible.



cardboard:
strong, light, stiff.



fabric:
soft, flexible, hard-wearing, can be stretchy, warm, absorbent.



rubber:
hard-wearing, elastic, flexible, strong.

John McAdam's process was so successful that roads were built in this way right across the world.



John Dunlop originally used rubber to make tyres for his son's tricycle.



Charles Macintosh invented the first waterproof fabric by painting a dissolved rubber solution onto cloth.



Key Knowledge

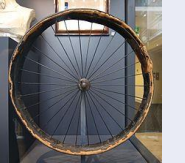
John McAdam

John was a Scottish engineer who experiment with using new materials to build roads, inventing a new process called 'macadamisation'.



John Dunlop

John Dunlop was a Scottish inventor who invented the air filled rubber tyre. It was originally invented in 1887 to use bicycles, and then became very useful when au were developed.



Charles Macintosh

Charles Macintosh was a Scottish inventor and chemist who invented waterproof fabrics in 1818. the Mackintosh raincoat was introduced in 1824.



Macadamisation

Macadamisation was the name given to John McAdam's construction process of building roads. The name tarmac means a road made like this using tar.