

Year 2 Summer Term Science Knowledge Organiser

KEY QUESTION: Why are certain materials used for particular purposes?

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.

Material Vocabulary

material	brick	fragile	rough
property	rock	delicate	smooth
suitability	wood	Translucent	waterproof
metal	plastic	opaque	absorbent
glass	flexible	stiff	elastic
rubber	rigid	squash	
sponge	hard	bend	
fabric	soft	Stretch	
cardboard	transparent	twist	



Some objects can be made from various materials for example spoons can be made from metal, wood and plastic.

Key Vocabulary

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

Squashing



Squashing

Squash an object by pushing both hands together.

Bending



Bending

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

Twisting



Twisting

Twist an object by turning your hands in opposite directions.

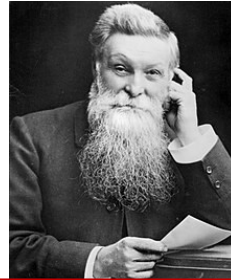
Stretching



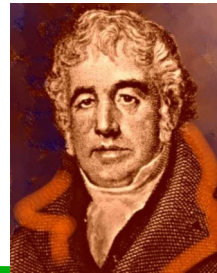
Stretching

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

People who invented new materials.



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



Charles Macintosh was a Scottish inventor and chemist who invented waterproof fabrics in 1818. He did this by painting dissolved rubber solution onto cloth. The Mackintosh raincoat was introduced in 1824



John McAdams was a Scottish engineer who experimented using new materials to build roads, inventing a new process called 'Macadamisation'. This process was so successful that roads were built this way right across the world.

Activities to complete at home. Bring in your work over the next 4 weeks so it can be celebrated and shared .

Spot and group the materials you see on the way to school.

Find an object in your house that is made using 3 different materials.

Using newspaper make the tallest tower possible without bending, what techniques did you use?

Make a model house using different materials. Explain why you have used certain materials e.g. I have used cling film for the windows because you can see through it.