

# Croxby Primary Academy

# **Year 2: Materials Knowledge Organiser**

### Key People/Scientists



Charles Mackintosh (1766-1843)

A Scotsman Charles
Mackintosh created the
first 'waterproof' fabric.
It was made by squeezing
liquid rubber in between
two pieces of fabric, then
pressing them together.



John Macadam (1827-1865)

A Scotsman John Loudon Macadam invented the first form of tarmac called Tarmacadam. The new form of tarmac on the roads we know today was made in 1901.



John Dunlop (1840 - 1921)

In 1887 John Boyd Dunlop developed the first practical inflatable tyre for his son's tricycle using his knowledge and experience with rubber.

# Misconceptions

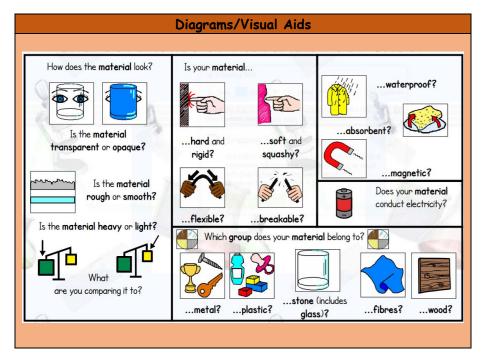
## Misconception:

Material means a fabric.

## Fact:

A material is anything that an object can be made from.

Key Questions	
What is a	A material is anything that something can be
material?	made from.
What are the	Wood, metal, plastic, glass,
most common	brick/rock, paper/cardboard and fabric.
materials?	
How can you	
change the shape	Squashing, stretching, bending or twisting.
of some objects?	
What happens	In some materials the particles can move around
when you apply	so the materials can change shape. In other
force onto a	materials the particles are so close together
material?	that they cannot move at all.
What are	Physical features or behaviours of a material.
properties of	E.g. One property of plastic is that it is
materials?	waterproof.



Key Vocabulary	
elastic	The material can stretch.
flexible	The material can bend easily.
hard	The material does not dent or scratch easily.
opaque	The material does not let any light through.
rigid	The material will not bend or change shape easily.
strong	The material doesn't break easily.
suitability	Having the properties that are right for a specific purpose.
translucent	The material lets some light through.
transparent	The material is see-through.