



Catholic Social Teaching Big Question:
Are there some materials that we shouldn't use?



Year 2 – Uses of Everyday Materials



1. Key Scientific Knowledge Concepts and Skills

Properties of Materials

cardboard  strong, light, stiff	fabric  Soft, flexible, hard-wearing, can be stretchy, warm, absorbent
glass  waterproof, transparent, hard, smooth	metal  strong, hard, easy to wash
paper  lightweight, flexible	plastic  waterproof, strong, can be made to be flexible or stiff, smooth or rough.
rubber  hard-wearing, elastic, flexible, strong	wood  hard, stiff, strong, opaque, can be carved into any shape

Squash an object by pushing your hands together.



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



Twist an object by turning your hands in opposite directions.



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



2. Key Scientific Vocabulary and Definitions

materials	Materials are what objects are made from (e.g. plastic, glass, wood)
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 (e.g. soft, stretchy, waterproof).
absorbent	Absorbent means that a material can soak up liquid easily.
opaque	Opaque means that you cannot see through it; it is not transparent.
transparent	Transparent means that it allows light to pass through it so you can see through it.

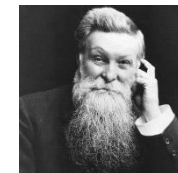
3. Prior Scientific Knowledge, Concepts and Skills

- Identify and name everyday materials and describe simple properties e.g. waterproof.
- Distinguish between an object and the material it is made from.
- Sort objects in two-three ways.



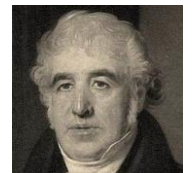
John McAdam

A Scottish engineer who experimented with new materials to build roads, inventing a new process called 'macadamisation'.



John Dunlop

A Scottish inventor who invented the air-filled rubber tyre. It was first used with bicycles and then for automobiles.



Charles Macintosh

A Scottish inventor and chemist who invented waterproof fabrics by painting dissolved rubber onto cloth.