

Science Subject Knowledge Bank Year 2: Use of everyday materials

<u>Vocabulary</u>	<u>Definition</u>
Material	Something that objects are made out of.
Transparent	Allows light to travel through so you can see through it.
Opaque	Does not allow light to travel through so you cannot see through it.
Property	A quality of a material

Can materials be used to make different things?

- Some materials are used for more than one thing (metal can be used for coins, cans, cars and table legs; wood can be used for matches, floors, and telegraph poles)

Can different materials be used to make the same thing?

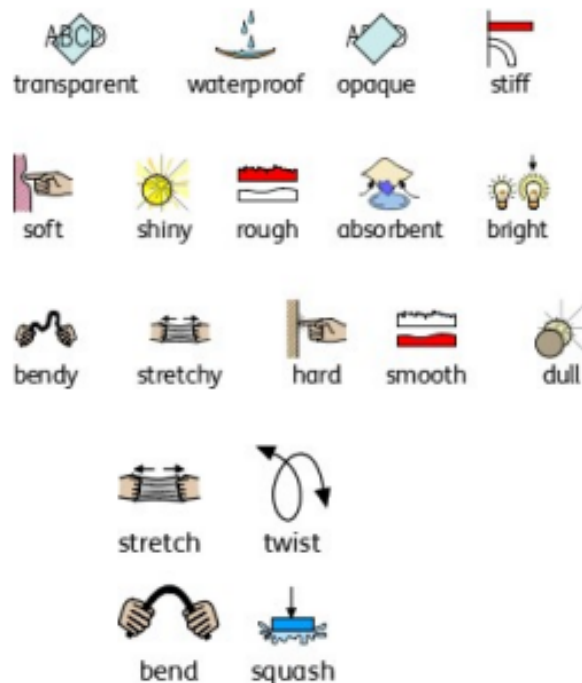
- Different materials are used for the same thing (spoons can be made from plastic, wood, metal, but not normally from glass)



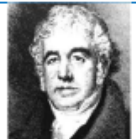
Why does the property of a material matter?

- The property of the material helps decide what objects can be made from it.
- Different materials will be best for different objects.

Which people have developed new materials?

- John Dunlop developed rubber tyres
- Charles Macintosh developed waterproof material
- John McAdam developed a material to make road surfaces.



<u>Name/Picture</u>	<u>Why significant</u>
 John McAdam 1756-1836	He was a Scottish engineer who experimented with using new materials to build roads, inventing a new process called 'macadamisation'. This process was so successful that roads were built in this way right across the world.
 John Dunlop 1840-1921	He 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. He originally used rubber to make tyres for his son's tricycle.
 Charles Macintosh 1766-1843	He was an inventor and chemist who invented waterproof fabrics in 1818. The Mackintosh raincoat was introduced in 1824. He invented the first waterproof fabric by painting a dissolved rubber solution onto cloth.