

Science Knowledge Organiser - Everyday Materials

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.

Key Vocabulary

materials	Materials are what objects are made 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).

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



Charles Macintosh

The clothes that people wear to protect them from the rain are waterproof. Waterproof fabric was invented by a scientist called Charles Macintosh. His invention was so important that raincoats are named after him!



Raincoats are called Mackintoshes, or macs.

Key Vocabulary

smooth	Smooth objects have no lumps or bumps.
bendy	Bendy things can be folded easily.
not bendy	If something is not bendy , it can't be folded easily.
waterproof	If something is waterproof , it keeps water out. It keeps things dry.
not waterproof	Not waterproof materials let water in.
absorbent	If something is absorbent , it soaks water up.
not absorbent	If something is not absorbent , it does not soak up water.
transparent	Transparent objects can be seen through.
opaque	Opaque objects can't be seen through.

Key Vocabulary

object	A thing that can be used. For example a door, chair, car, table are all objects .
material	Materials are what an object is made from.
hard	Not easily broken or bent.
soft	If something is soft , it is easy to cut, fold or change the shape of.
stretchy	Can be pulled to make it longer or wider without breaking.
shiny	Reflects light easily.
dull	Doesn't reflect light. Doesn't look bright or shiny .
rough	If something is rough , it feels and looks uneven or bumpy.