

# Materials - Science



brick



fabric



paper



stone



glass



plastic



wood



metal

## Key scientist

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



**Charles Macintosh**

Charles Macintosh was a Scottish inventor and chemist who invented waterproof fabrics in 1818. The Mackintosh raincoat was introduced in 1824.

## Key vocabulary

### Key Vocabulary

<b>object</b>	A thing that can be used. For example a door, chair, car, table are all <b>objects</b> .
<b>material</b>	<b>Materials</b> are what an <b>object</b> is made from.
<b>suitability</b>	<b>Suitability</b> means having the <b>properties</b> which are right for a specific purpose.
<b>properties</b>	This is what a <b>material</b> is like and how it behaves (soft, stretchy, waterproof).
<b>hard</b>	Not easily broken or bent.
<b>soft</b>	If something is <b>soft</b> , it is easy to cut, fold or change the shape of.
<b>stretchy</b>	Can be pulled to make it longer or wider without breaking.
<b>shiny</b>	Reflects light easily.
<b>dull</b>	Doesn't reflect light. Doesn't look bright or <b>shiny</b> .
<b>rough</b>	If something is <b>rough</b> , it feels and looks uneven or bumpy.

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