

Materials

Significant Scientists

John Dunlop



A Scottish inventor (1840 - 1921) who used rubber to invent the air-filled tyre for a bicycle. It was later developed for cars.

Charles Macintosh



A Scottish chemist (1766 - 1843) who invented waterproof fabrics in 1818. The Mackintosh raincoat was introduced in 1824.

Enquiry Skills

Fair testing

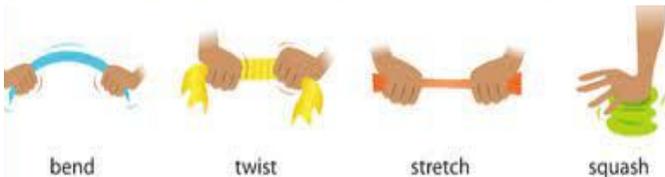
Pattern seeking

Identifying and classifying

Working Scientifically Skills

Question, answer, observe, sort, group, compare, measure, test.

Record results – diagram, chart.



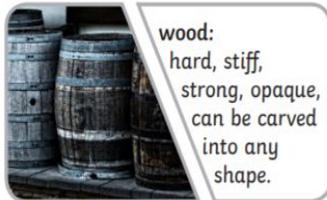
Key Knowledge

Materials are what objects are made from.

Some materials have certain properties which are right for a specific purpose. This is why they are used to make this object.

A materials property is what it is like and how it behaves e.g. soft, stretchy and waterproof.

To learn about a materials properties we **squash, bend, twist and stretch** it.



Key Vocabulary

| | |
|-------------------|---|
| property | A characteristic of something. |
| waterproof | Keeps out water. |
| absorbent | Able to soak up liquid easily. |
| squash | Crush or squeeze (something) with force so that it becomes flat, soft, or out of shape. |
| bend | To bend a material is a way of physically changing its shape. |
| flexible | Bends easily without breaking. |
| twist | To form a material into a spiral shape. |
| stretch | Make longer or wider without tearing or breaking. |

Pattern Seeking

Research

Fair Testing

Science Enquiry

Observation over Time

Identifying & Classifying