

## Scientist



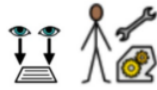
[Charles Macintosh](#)  
(inventor of waterproof materials)  
[Daniel Azahan](#)  
(Mechanical engineer)

## Skills

I'm performing simple tests like a builder.



I'm using my observations to suggest answers to questions like mechanical engineer.



## Careers

Builder (build structures)

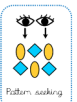
Mechanical engineer (designs, analyses and manufactures mechanical systems)

## Enquiries



Which material would be best for the roof of a house?

Would a paper boat float forever?



Do magnetic materials always conduct electricity?

Which materials are shiny and which are dull?

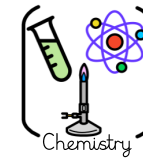


How have the materials we use changed over time?

# Y2 EVERYDAY MATERIALS



## Main idea



Explore in more depth why materials are chosen for certain purposes. Experiment with changing the shapes of solids. Identify and discuss the uses of different everyday materials so that they become familiar with how some materials are used.

## What you should already know

Distinguish between objects and the materials they are made of.

Differentiate between natural and manmade materials.

Describe the properties of a selection of materials, such as wood and plastic.

## What comes next?

Compare and group materials together, according to whether they are solids, liquids or gases. Observe that some materials change state when they are heated or cooled and link this to the water cycle.

## Key vocabulary

Natural	Absorbent
Manmade/synthetic	Flexible
Squashing	Rigid
Bending	Opaque
Twisting	Transparent
Stretching	Magnetic
Waterproof	

## Natural and Man-Made Materials

### Natural Materials



### Man-Made Materials



## Key Learning

- Pupils will become more confident in describing the physical features of a material, such as wool being soft and absorbent.
- They will learn to identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.
- Pupils will investigate how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

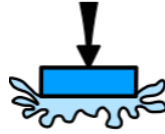
# Year 2: Everyday materials



Natural materials: wood, metal, rock, rubber, cotton, leather, wool



Manmade / synthetic materials: plastic, glass, brick, paper, cardboard, ceramic



Squashing: to press, beat, crush or flatten



Bending: to cause to take on a curved or angled form, or a different form.



Twisting: to wind, coil, or weave around something else.



Stretching: to cause to extend or reach from one point to another.



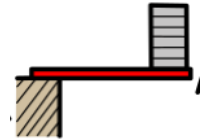
Waterproof: not letting water through; not absorbent.



Absorbent: able to soak up liquid or moisture.



Flexible: can flex in shape to a curve



Rigid: not bendy or stretchy



Transparent: letting light pass through; gives a clear view of objects on the other side



Opaque: not letting light pass through

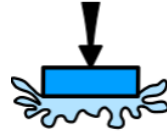
# Year 2: Everyday materials



Natural



Manmade/  
synthetic



Squash



Bend



Twist



Stretch



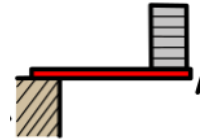
Waterproof



Absorbent



Flexible



Rigid



Transparent



Opaque