

Uses of Everyday Materials



1. What is an object made from?

Every object is made from a **material** — like wood, plastic, metal, glass or fabric.

- One object can be made from more than one material.

3. Who invented new uses for materials?

Some people changed how we use materials.

- **John Dunlop** invented the rubber tyre.
- **Charles Macintosh** invented the waterproof coat.



5. Which material is best at keeping water out?

Not all materials react to water the same way.

- **Waterproof** stops water; **absorbent** soaks it up.

6. How do we choose materials to build a boat that floats?

A good boat hull needs the right properties.

- It must be **waterproof** and **rigid**.

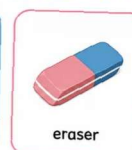
Objects Found in the Classroom



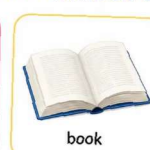
pencil



pen



eraser



book



chair

2. How have materials changed over time?

Long ago, people mostly used natural materials like wood and stone.

- Today we also use **plastic**, which is light and cheap.

4. What happens when we squash, bend, twist and stretch materials?

Materials react differently to a push or pull.

- **Flexible** materials bend; **rigid** materials keep their shape.

Materials Waterproof Test

1. Gather your materials.



2. Place a piece of each material over the top of a cup.



3. Pour a small amount of water on top of each material.



4. Wait a few minutes. Then check if any water has got through.



Record your results

Material	Waterproof? (Yes / No)
Foil	
Plastic	
Card	
Paper	

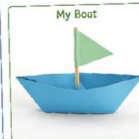
A waterproof material keeps the water on top. A non-waterproof material lets the water through.

KS1 BOAT DESIGN

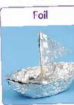
Design and make a boat using only one material.



I will use paper.



Examples using one material



Remember: Use only ONE material for your boat.

7. TAPS: How do we test which materials make the best boat?

We follow the steps of a fair test.

- **Predict**, test, **record**, then write a **conclusion**.

2. See how much weight it can hold before it sinks.



How many cubes can your boat hold?

VOCABULARY

material object wood metal plastic glass rigid
bendy waterproof absorbent float / sink hull

SKILLS I'LL USE

- Compare & group materials
- Perform simple tests
- Record with pictures & tables
- Make a prediction