

Year 2 Knowledge Organiser

Unit: Everyday Materials

Unit Lessons

- Compare the uses of everyday materials
- Explain why we use certain materials
- Investigate squashing, bending, twisting and stretching
- Explore the work of Charles MacIntosh; understand how the properties of materials can be changed
- Know about John McAdam's invention; recognise that new materials are constantly being invented
- Explore the work of John Dunlop; identify and compare the usefulness of certain materials when forces are applied
- Explain why we use certain materials

Did you know?

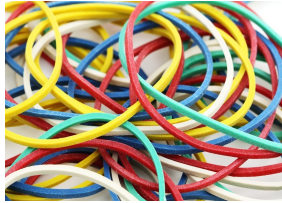
To change the shape of an object, you must always apply a force to it.

Tarmac was named after road-builder John Macadam and a raincoat (mac) was named after inventor Charles MacIntosh!



durable

absorbent



stretchy

flexible



waterproof

strong



Rubber – used in car tyres, elastic bands and much more, is originally grown on trees in the rainforest!

Most of the materials we use every day can be recycled and made into new items. Make sure you recycle!

GR8! – 8 words and meanings to learn

| Key Word | Meaning |
|---------------|--|
| 1. force | A strength or power placed upon an object. |
| 2. absorbent | Able to soak up another substance or liquid. |
| 3. waterproof | Able to resist water. |
| 4. stretch | Making something longer or wider without it tearing or breaking |
| 5. repel | To move something back by force. |
| 6. squash | To squeeze something with such force that it becomes flatter or changes shape. |
| 7. properties | The qualities of an object or material; what it can do. |
| 8. invention | To make or design something new. |

Before and After...

| Question 1: What makes brick a good material to build a house from? | Start of unit: | End of unit: |
|---|----------------|--------------|
| Brick is waterproof | | |
| Brick is flexible | | |
| Brick is warm | | |
| Brick is strong | | |
| Brick is malleable | | |
| Brick is conductive | | |

| Question 2: What makes kitchen roll a good material to use in the kitchen? | Start of unit: | End of unit: |
|--|----------------|--------------|
| Kitchen roll is absorbent | | |
| Kitchen roll is non-absorbent | | |
| Kitchen roll is soft | | |
| Kitchen roll is transparent | | |
| Kitchen roll is translucent | | |
| Kitchen roll is pliable | | |

| Question 3: What materials are easy to twist? | Start of unit: | End of unit: |
|---|----------------|--------------|
| wood | | |
| glass | | |
| metal | | |
| cloth | | |
| sponge | | |

| Question 4: Why is waterproof clothing important to a mountaineer? | Start of unit: | End of unit: |
|--|------------------------------------|------------------------------|
| To keep warm | To ensure your clothes last longer | To keep your clothes pliable |
| To keep dry | To keep your clothes clean | To keep your clothes stylish |
| To stop your clothes rotting | To keep your map dry | To keep your clothes durable |

| Question 5: Why is copper a good material to use as a saucepan? | Start of unit: | End of unit: |
|---|----------------|-----------------|
| Its conductive | Its hard | It’s cheap |
| It keeps its heat | Its pliable | Its transparent |
| It’s a good colour | It flexible | Its absorbent |