# Some common materials and their characteristics.

**Opaque** means that it doesn't let any light through. **Transparent** means that the material lets light through. **Translucent** means that it lets some light through.



- Found in the ground, sometimes mixed in with rocks.
- Strong, hard, shiny, malleable (they can be hammered into a different shape without breaking and they can be stretched out into wires).
- **Iron** and **steel** are magnetic. Other metals are not magnetic.

Some metals are good electrical and thermal (heat) conductors.



- Made of fibres woven together.
- Some fabrics are natural (the fibre comes from living things), e.g. wool, silk, cotton.
- Natural fabrics are quite expensive.
- Of natural fabrics, wool gives warmth and cotton is cool and absorbent (it soaks up liquids).
- Some fabrics are man-made, e.g. polyester, nylons.
- Man-made fabrics are usually easy to wash and dry and are hard-wearing.



- The raw material of the Earth. They are underground, on beaches, in soil.
- Some rocks are hard, e.g. granite.
- Some rocks are soft, e.g. chalk.
- Some rocks are impermeable to water (they do not allow water to go through), e.g. slate.

Some rocks are permeable to water (they allow water to go through), e.g. sandstone.

## Plastic

- Made from oil.
- Strong, can be made into any shape.
- Not magnetic.
- Good electrical and thermal insulators.
- Can be coloured.

Can be transparent, translucent or opaque.

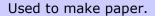


- Made from clay which is first shaped and then heated.
- Strong, but glazed pottery can shatter.
- Usually opaque.

Can be made into objects that have different shapes.



- Comes from trees.
- Strong, flexible and long lasting.
- An electrical and thermal insulator.





- Made from heating sand and chemicals together.
- Strong, but can shatter.
- Usually transparent.

Can be made into objects with different shapes.











