

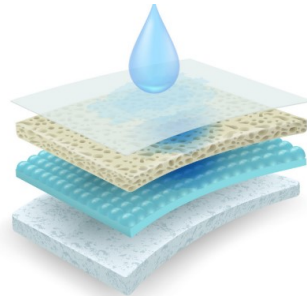
What should I already know?

- All matter is made up of particles.
- Rocks have different levels of hardness.
- Some materials are conductors and insulators of electricity.
- Magnets can exert a force of attraction.

What will I know by the end?

- How to compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and their response to magnets.
- Be able to give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.

Testing absorbency



Scientific Skills and Enquiry

- Carry out tests to answer questions.
- Predict the outcome.
- Explain how to make a fair test so that materials can be compared.
- Record observations from experiments.
- Present findings verbally and through the use of a variety of graphs.

Vocabulary

Hardness: A measure of how resistant a solid is when a force is applied.

Insulators: Materials where heat/electricity do not pass through easily.

Strength: The capacity of an object to withstand force applied to it.

Absorbent: Materials that soak up liquid easily.

Durable: Materials able to withstand wear, pressure, or damage.

Conductors: Materials where heat/ electricity pass through easily.

Water proof : Materials that stop water from passing through.

Transparent : Materials that allow light to pass through.

Opaque: Materials that do not allow light to pass through.

Translucent : Materials that allow light to pass through partially.

Magnetic field: A force that pulls on other magnetic materials, such as iron, and attracts or repels other magnets

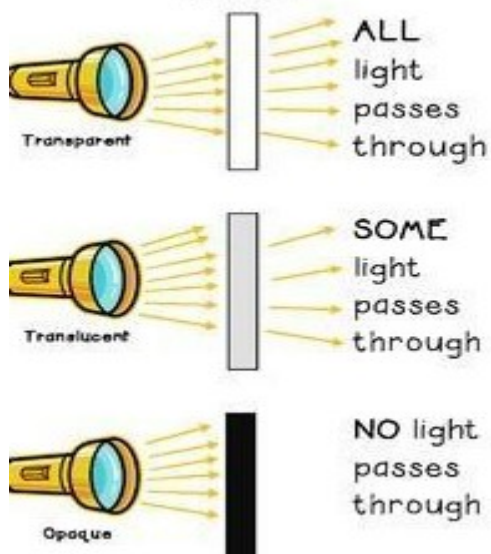
Variable: A feature that will change in the experiment.

Enquiry: To find information by asking a question.

Scatter graph: Compares two sets of data that will have an impact on each other.

Line graph: Shows how something changes over time.

Transparency



Examples of magnetic materials



nickel knife



cobalt coin



Steel spoon



iron nail



steel paperclip