

Year 1 Everyday Materials

Statutory Requirements:

- Distinguish between an object and the material from which it is made
- Identify and name a variety of everyday materials, including wood, plastic, glass, water and rock
- Describe the simple physical properties of a variety of everyday materials
- Compare and group together a variety of everyday materials on the basis of their physical properties

Working Scientifically:

- Asking simple questions and recognising that they can be answered in different ways
- Observing closely, using simple equipment
- Performing simple tests
- Identifying and classifying
- Using their observations and ideas to suggest answers to questions
- Gathering and recording data to help in answering questions

Key Knowledge:

The uses we can make of materials depends upon their properties.

Elasticity– Elastic materials can be stretched and they return to their original shape (e.g. rubber and nylon). However, materials have an elastic limit, a point at which the material is permanently changed in shape.

Texture – This is the feel of a material. Smooth means that it doesn't have lumps so things slide easily on it. Rough means it has an uneven surface. Sharp means its edges cut things easily. Abrasive means that it will wear away other surfaces if rubbed against them.

Hardness – A soft material is easy to scratch or dent. Hard materials are more difficult to scratch or dent.

Strength – A strong material is one that is difficult to break. In order to test strength we need to apply a force.

Viscosity – This is thickness and how easily things move through it.

Key Vocabulary:

- Types of materials:
wood, plastic, glass, metal, water, rock, brick, fabric, sand, paper, flour, butter, milk, soil
- Properties of materials:
hard/soft, stretchy/not stretchy, shiny/dull, rough/smooth, bendy/not bendy, transparent/not transparent, sticky/not sticky
- Verbs associated with materials:
crumble, squash, bend, stretch, twist
- Senses:
touch, see, hear, smell and taste

Key Scientists:



John Boyd Dunlop (1840 – 1921)
Scottish inventor and veterinary surgeon, who invented many rubber products.



Charles Macintosh (1766 – 1843)
Scottish chemist and inventor of waterproof fabrics.