

## Science Y1 Autumn 1 and 2 – Everyday Materials

In this unit of work, the children will explore, name, discuss and raise and answer questions about everyday materials to become familiar with the names of materials and their properties. They will observe closely, using simple equipment, perform simple tests and use their observations to suggest answers to questions.

### In this unit children will:

**Distinguish between an object and the material from which it is made.**

**Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.**

**Describe the physical properties of a variety of everyday materials.**

**Sort objects and materials using a range of properties**

**Compare and group together a variety of everyday materials based on their simple physical properties.**

Sort objects and materials using a range of properties

Choose an appropriate method for testing an object for a particular property for example which material makes the best umbrella? Use their results to answer questions on the properties of a material.

### Prior Learning

**F.S** Use talk to work out problems and organise thinking

### Cross Curricular Links

**Maths** – Data collection,

**ICT** – for constructing a bar graph

### Key Vocabulary

**Wood** – A hard material that forms the branches and trunks of trees and can be used as a building material.

**Plastic** – A man made material that can be shaped when soft into many different objects.

**Glass** – A hard transparent material, used to make windows.

**Metal** – A hard, strong material which heat, and electricity can travel through.

**Water** – A clear liquid without colour or taste, that falls from the sky as rain and is essential for plants and animals.

**Rock** – The dry, solid part of the Earth's surface.

**Absorbent** – Materials which soak up liquid quickly.

**Transparent** – You can see through it.

**Stiff** – Something which will not bend easily.

**Waterproof** – Does not let water pass through it.

**Smooth** – No roughness or bumps.

## Key Knowledge

Objects feel and look different based on the material they are made from.

Everything is made up of materials. When we want to make something, we need to choose the best material for the job.

Materials can be made from wood, plastic, glass, metal, water, and rock.

The words I can use to describe materials are – transparent, waterproof, opaque, stiff, soft, shiny, rough, absorbent, bright, bendy, stretchy, hard, smooth, and dull. Materials need to be suitable for the object they are to be made into – they need to be the best material for the job.

Sometimes we want a material to be stretchy because of the object it is going to make e.g. a pair of tights.

Some materials are natural while others are man-made.

Natural materials are materials found in nature. They include – chalk, sand, leather, iron, gold, cotton, coal, and wood.



Man-made materials are materials which have been produced by humans. Man-made materials include – plastic, concrete, glass, paper, rubber, steel, plastic, polyester.

If a material is rigid it cannot bend.

If it can bend or stretch, it is flexible.

## Key Questions

What material is this object made from?

What useful property does this material have?

What would the classroom be like if the tables were made of jelly?

Why is this material used to make this object?