

Key Stage **KS1**

Topic

Identify Everyday Materials

Class **1**

Range **1 (2)**

End of Unit Goals

Pupils will be able to:

- 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 simple physical properties of a variety of everyday materials
- Compare and group together a variety of everyday materials on the basis of their simple physical properties

Explaining Science

- Remember some simple science facts
- Use & remember science words during activity
- Add science word labels to diagrams

Classification

- Sort using yes/no statements
- Group by difference or similarity
- Link properties of materials to an application

Key Terminology:

Solid, bending, squashing, twisting, stretching, similarity, difference, property, hard/soft, shiny/dull, bendy/not bendy, stretchy/stiff, transparent/opaque, rough/smooth, waterproof/not waterproof, absorbent/not absorbent, metal, plastic, glass, brick, paper, fabric, foil, elastic, wood

Lesson	Content Objective	Skill Objective	Possible Activities
1	What are objects made from?	Remember some science facts & words	<ul style="list-style-type: none"> • Link an object to the material(s) it's made from. • Provide a wide range of objects (could be linked to a theme). Use pupils own words and knowledge to develop material words (e.g. wood, plastic, glass, metal, rock, wool, etc). Write words on laminated cards and display on a word wall. • Using a variety of objects, match them with labels (e.g. plastic, glass, metals, wood, etc). Use items which will prompt discussion e.g. a plastic milk carton, a plastic toy and a plastic folder. Begin to talk about the materials they are made from by describing some properties.
2	Can you name everyday materials?	Remember some science words & facts during activity	<ul style="list-style-type: none"> • Confirm materials vocabulary. Begin to link materials to their properties. • Sensory exploration of materials ('feely bag', observation, circle time). How do different materials feel? Begin a discussion using comparative adjectives for properties (e.g. rough/smooth). Write words on laminated cards. Display on word wall to support linked words (e.g. antonyms). • 'Materials walk' (lists, photos, etc of different materials around school). Include photos in their books (could label with material and/or properties). Encourage recall.
3	What are the properties of materials?	Add science word labels to diagrams	<ul style="list-style-type: none"> • Link a material to its property. Use a theme to create importance and relevance. • Children have access to lots of scientific words about properties, and lots of objects to feel and investigate. Find an object with one or more than one property e.g. glass is hard and transparent. How many properties can you attribute to any one object? Add property labels. Compare & discuss. • Guessing games to choose which item a child is describing by asking scientific questions (properties). • Team, running game (in hall). Objects in centre. PPT flashes up property(ies). Pupils have to run and choose. Points for getting it right. Add laminated property labels as they go. Compare & discuss. • Make a 'den'. Find appropriate materials to use & why (provide different/same materials per group).
4	Can you compare the properties of materials?	Sort using yes/no statements	<ul style="list-style-type: none"> • Compare materials by their properties. • Sort a wide range of objects based on a property, e.g. "hard" or "flexible". Show how something made from the same material may have diverse properties (use plastic example). • Children sort objects/materials by starting with the property (pupils use a word list or recall words).
5-6	Which materials would be best and why?	Link properties of materials to an application	<ul style="list-style-type: none"> • Link to a theme. Describe or create objects by deciding which materials are best (based upon property). • Evaluate 'dens' by trying them out. Did the materials work well? What would they change? Why? • Children are given the task of designing an object (based upon theme), e.g. a space ship, a bridge, a container for something heavy, superhero cape, etc. Decide what properties would be useful. Group materials (Venn / Carroll diagrams) to decide which would be best. • Discuss which materials would be best to use. Construct/draw object using sample materials (add property

			labels). Support pupils to begin to give scientific reasons why they have chosen those materials based on what they've observed about their properties.
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