

# Year 1 Science Curriculum

Working scientifically links   Rubric/PCMD opp.   Key Vocabulary

## Everyday Materials

**What's the big picture?** All objects are made of materials. Children to generate own questions about materials *"I know how to ask simple scientific questions"*  
Use of pre assessment of children's knowledge.

**Prior learning:** Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their environments and how environments vary. They make observations of animals and plants and explain why some things occur and talk about changes (ELG).

National Curriculum Principles	Objectives	Knowledge and key Vocabulary	Reading opportunities	Technology
Distinguish between an object and the material	<p>I can distinguish between an object and the material it is made from</p> <p>I know the materials that an object is made from</p>	<p>Children to name a <b>variety</b> of <b>objects</b> and the <b>materials</b> they are made from.</p> <p>Some objects can be made from different materials e.g. plastic, metal or wooden spoons.</p> <p><a href="#">Create a double page spread</a></p>	<p>The three little pigs</p> <p>The great paper caper by Oliver Jeffers</p> <p>Sheep to jumper by Fiona Macdonald</p>	<p>Match the object to the material (Seesaw)</p> <p>Use the internet to safely search for images of objects.</p> <p>Create a video talking about the objects and the materials they are made from.</p>
To identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock	I know the difference between wood, plastic, glass, metal, water and rock	Children to identify and name different materials - <b>wood, metal, plastic, glass, fabric, stone and paper.</b>		Object hunt using the camera...photograph the objects and name materials.
To describe the simple physical	I know about the properties of	Children to describe properties of different materials <b>hard/soft, stretchy/stiff, shiny/dull rough/smooth bendy/not bendy</b>		Record children describing the

## Year 1 Science Curriculum

Working scientifically links   Rubric/PCMD opp.   Key Vocabulary

properties of a variety of everyday materials	everyday materials	<p><b>waterproof/not waterproof absorbent/not, opaque/transparent</b></p> <p>Some materials can have different properties when in different forms e.g. plastic</p> <p>Children to complete a double page spread</p> <p>Investigation - what is the best material for..... link to project - complete a comparative test and observe closely - ask simple questions and suggest answers to questions</p>		<p>properties of different materials using the key vocabulary. (Could be used as an assessment)</p> <p>Investigation template</p>
Compare and group together a variety of everyday materials on the basis of their simple physical properties	I can group objects based on the materials they are made from	Compare and group materials named above based properties - <b>classification</b>		Use camera to group materials. Add voice notes or annotations to add further details.

### Famous Scientists

Chester Greenwood - inventor of earmuffs

### Common misconceptions

Some children may think:

- only fabrics are materials
- only building materials are materials
- only writing materials are materials
- the word 'rock' describes an object rather than a material
  - smooth is the same as soft
- 'solid' is another word for hard

# Year 1 Science Curriculum

Working scientifically links   Rubric/PCMD opp.   Key Vocabulary

## Enquiry ideas

<u>Comparative tests</u>	<u>Identify and classify</u>	<u>Observations over time</u>	<u>Pattern seeking</u>	<u>Research</u>
Which materials are the most flexible?	We need to choose a material to make an umbrella which materials are waterproof?	What happens to materials overtime if we bury them in the ground?	Is there a pattern in the types of materials that are used to make objects in a school?	How are bricks made?
Which materials are the most absorbent?		What happens to shaving foam over time?		Which materials can be recycled?