



# Eccleston Lane Ends Planning



Subject	Science
Year Group	Year 1
Topic	Materials
Term	Spring 1

## Sequence of lessons – objectives to be met

Lesson 1 -	<p><b>LO: I can identify and name different materials.</b></p> <p><b>Key words:</b> Materials, wood, plastic, glass, metal, water, rock.</p> <ol style="list-style-type: none"> <li><b>Exploring Materials:</b> Explain to children that they will be exploring some different materials and that although this is exciting, they need to follow the rules to be safe. Have items prepared on each table; <ul style="list-style-type: none"> <li>- Plastic, beads, bottles, cutlery, straws, ruler, bag.</li> <li>- Wood, plank, spoon, coaster, pencil.</li> <li>- Metal, spoon, sharpener, bottle, cup.</li> <li>- Glass, glasses, cup, magnifying glass.</li> </ul> Go through the points on the <b>Lesson Presentation</b> and emphasise the need for the children to be sensible and safe. Children then explore the different materials (<i>where possible, these are raw examples e.g. a plank of wood rather than a wooden chair</i>). Ensure that children are suitably supervised when handling potentially more dangerous materials (e.g. glass, metal, wood and rock). Can children name any of the materials?</li> <li><b>Naming Materials:</b> Go through some of the names of different materials. Discuss what some of the materials may be used for (<i>briefly, as this is the main focus for lesson 2</i>).</li> <li><b>Matching:</b> Children use the differentiated <b>Labelling Materials Activity Sheet</b> to match the words to the materials. Are children able to correctly name the different materials? <b>All pupils to attempt 3* sheet, LMc to help MA, HA to work independently and HL to work with LA.</b></li> <li><b>EXTENSION:</b> Give each pair a different material and children have to think of three adjectives to describe their material. Record these adjectives and keep safely for the lesson three.</li> </ol>
Lesson 2 -	<p><b>LO: I can tell the difference between an object and the material it is made from.</b></p> <p><b>Key words:</b> Object, common, same.</p> <ol style="list-style-type: none"> <li><b>Presentation – What did we learn about last week?</b> What have all the objects got in common? Are children able to identify the materials the objects are made from? Ask groups to feedback and encourage children to explain their reasoning. <b>Explain that although some of the objects are made of more than one material (e.g. the magnifying glass), they all had one material in common.</b></li> <li><b>Material Challenge:</b> Discuss the difference between actual objects and the materials they are made from. Ask children to identify the objects in the pictures, as well as the materials they are made from.</li> <li><b>Objects and Materials:</b> Children use the differentiated <b>Objects and Materials Activity Sheet</b> to identify an object and show what material/s it is made from. Are children able to distinguish between objects and the materials from which they are made? LA to complete 1* with LMc MA to complete 2* with HL HA to complete 2* Independently</li> <li><b>Extension:</b> With a partner, children look at the pictures and discuss which they think is the odd one out. Discuss ideas, encouraging children to explain their thinking</li> </ol>
Lesson 3 -	<p><b>LO: I can describe the properties of everyday materials.</b></p> <p><b>Key/New Words:</b></p>

	<p><b>Describe, properties, hard, soft, stretchy, stiff, shiny, dull, rough, smooth, bendy, not bendy, waterproof, not waterproof, absorbent, not absorbent, opaque, and transparent.</b></p> <ol style="list-style-type: none"> <li><b>Keywords:</b> Recap the keyword list which was compiled at the end of lesson one. Go through the words and explain what they mean. Display the words on the <b>Lesson Presentation</b> - did children think of any of these words? Explain these words are known as 'properties'.</li> <li><b>Describing Materials:</b> Let children explore a range of materials and objects made from different materials. Encourage children to describe what materials look like and how they feel. Give each child a card from the <b>Everyday Materials Vocabulary Cards</b> and ask them to put it next to a material or an object which has that property. <b>Shuffle the cards and then repeat several times.</b> Encourage children to explain their thinking. Are children able to select words which describe the materials?</li> <li><b>Description Activity:</b> Children use the differentiated <b>Description Activity Sheet (MA and HA)</b> to describe the properties of the materials, using the <b>Everyday Materials Word Mat</b> to support them. Are children able to choose words which describe the materials?  <a href="#">LA to complete 1* sheet - LMc</a>  <a href="#">MA to complete 2* Sheet.</a>  <a href="#">HA to complete 3* sheet – poster.</a></li> <li><b>Feely Bag, Plenary :</b> Choose a child to describe a material from the feely bag to the class, just by touching it. Children look at their <b>Feely Bag Activity Sheet</b> to help work out which material is being described. Question children as to why they think it's a particular material or why they don't think it's a particular material.</li> </ol>
<p><b>Lesson 4 -</b></p> <p><a href="#">Differentiated Property Testing Activity Sheet - 1 per child</a></p> <p>Gather a selection of materials and objects made of different materials:</p> <ul style="list-style-type: none"> <li>- Wellies</li> <li>- T shirt</li> <li>- Paper</li> <li>- Rubber gloves</li> <li>- Window</li> <li>- Cardboard box</li> <li>- Plastic bottle</li> <li>- Tin can</li> </ul> <p><a href="#">Shallow containers filled with water.</a></p>	<p><b>LO: I can identify which materials have certain properties.</b></p> <p><b>Key words:</b> Behave, test, record</p> <ol style="list-style-type: none"> <li><b>Properties:</b> Children talk to a partner and think of as many properties of materials as they can.</li> <li><b>Keywords:</b> Display the words on the <b>Lesson Presentation</b> - how many of these properties did children remember? Can anyone explain what any of the words mean?</li> <li><b>How Materials Behave:</b> Read through the information and discuss how some properties are easier to identify than others (<i>e.g. it's easy to see if something is shiny or dull just by looking at it</i>). Model how to test to see if something is waterproof, transparent or opaque or absorbent. Can children choose words which describe how materials behave?</li> <li><b>Property Testing:</b> Children use the differentiated <b>Property Testing Activity Sheets</b> to test each material and record their findings. Explain that they are testing the properties of materials by looking at objects that are made from that material. Are children able to test materials to see how they behave?</li> <li><b>Property Testing Results:</b> Discuss what children discovered. Which materials were bendy, waterproof and absorbent? Which materials were transparent and opaque? How did you test them to find out? Discuss which materials the objects are made from. For example, Why are windows transparent? Which material are they made from?</li> </ol>
<p><b>Lesson 5</b></p> <p><a href="#">Hoops, printed labels of materials and different categories.</a></p> <p>To compare and group together a variety of everyday materials on the basis of their simple physical properties by sorting objects.</p>	<p><b>Sorting materials</b></p> <p><b>L.O: I can sort objects by their properties.</b></p> <ol style="list-style-type: none"> <li><b>Sorting:</b> Children work with a partner to sort each set of pictures on the <b>Lesson Presentation</b> into two groups. Work through each set and discuss how the pictures could be sorted (<i>red and not red, farm animals/zoo/wild animals, hard and soft</i>).</li> <li><b>Sorting Circles:</b> Sitting in a circle, children look at the different objects and pass them around. How could we describe their properties? Use the <b>Everyday Materials Vocabulary Cards</b> to remind children of the different properties. How could we sort these objects? Using the <b>Everyday Materials Vocabulary Cards</b>, the sorting hoops and the <b>Lesson Presentation</b>, model how to label each circle e.g. rough and smooth. Ask children with a rough object to put it in the circle. Then ask children with a smooth object to put it in the other circle. Identify objects which are both rough and smooth.</li> </ol>

	<p>Where could we put them? Model how to overlap the circles to include any objects which have both properties.</p> <p>3. <b>Property Sort:</b> Children complete the differentiated activities to sort the objects. Are children able to sort and group objects with the same properties together? Can children explain how they have sorted their objects? Take photos of their sorted objects. (<i>These could be put in books and/or added to a display</i>). Then challenge them to think of absorbent and not absorbent objects.</p>
<b>Lesson 6</b>	<b>End of topic quiz – Materials.</b>