

Science Medium Term Plan Everyday Materials Y1

National curriculum outlines that pupil in Year 1 under seasons should:

- Observe changes across the four seasons
- Observe and describe the weather associated with the seasons and how day length varies


The principal focus of science teaching in key stage 1 is to enable pupils to experience and observe phenomena, looking more closely at the natural and humanly constructed world around them. They should be encouraged to be curious and ask questions about what they notice. They should be helped to develop their understanding of scientific ideas by using different types of scientific enquiry to answer their own questions, including observing changes over a period of time, noticing patterns, grouping and classifying things, carrying out simple comparative tests, and finding things out using secondary sources of information. They should begin to use simple scientific language to talk about what they have found out and communicate their ideas to a range of audiences in a variety of ways. Most of the learning about science should be done through the use of first-hand practical experiences, but there should also be some use of appropriate secondary sources, such as books, photographs and videos.


'Working scientifically' is related to the teaching of substantive science content, examples show how scientific methods and skills might be linked to specific elements of the content:









- 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 questions (Show how content and concepts link) Differentiated Learning Objectives	Teaching and learning activities (Linked directly to objectives)	Resources (To help pupils reach the learning objectives)	Written and non-written Outcomes (Assessment including homework's)
1) What materials can we find? How can	Science Reasoning task: Explorify: Write Away-Odd One Out What is the same/ what is different? How is the appearance/ what it does the same or different?	Activity 1: Objects needed to be used in discussion	Science Reasoning: I have classified them here .. because

<p>we classify these materials?</p> <p>Science Capital: Material Hunt at home, what can you find? What is it used for?</p> <p>Science Working scientifically Skills: Classify the different objects found on the hunt in different material types- glass, fabric etc.</p> 	<p>Activity 1: Objects in the middle of the table, the children to identify the objects and then to name them, what material is the object made out of?</p> <p>Activity 2: Material hunt- go in the local environment around school and identify the objects they find and discuss/ identify the material the object is made out of.</p> <p>Activity 3: Cut and stick the different objects and classify into the correct material. Have Venn diagram to classify the different materials.</p>	<p>Activity 2: Material hunt sheet and outside area.</p> <p>Activity 3: Venn Diagram/ cut and stick sheets.</p>	<p>Homework- Pre-task- name objects around the house- what material are they made out of.</p>
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<p>2) What is the difference between the object and material it is made from?</p> <p>Science Capital: What are the objects around your home? What material are they made from?</p> <p>Science Working scientifically Skills:</p> 	<p>Science Reasoning task: Explorify: Brushing up- Odd one out- What is the same? What is different? Discuss the appearance, where they might be found and what they do.</p> <p>Activity 1: classify object and material -Which is the object name and what is the material the object is made out of.</p> <p>Activity 2: Write sentences about labelling which is the object, and which is the material.</p>	<p>Activity 1: classify object and material -Venn Diagram and cut and stick objects to classify / real objects to classify.</p> <p>Activity 2: Write sentences about labelling which is the object, and which is the material.</p>	<p>Science Reasoning: I have classified them here .. because</p>
<p>3) Can we describe the properties of different materials?</p> <p>Science Capital: What is a table made out of? Why is that suitable material?</p> <p>Science Working scientifically Skills: classify/ observing</p>	<p>Science Reasoning task: Explorify: It's in the bag! Odd one Out What is the same? What is different? Discuss the appearance, where they might be found and what they do.</p> <p>Activity 1: classify object and material -Which is the object name and what is the material the object is made out of.</p> <p>Activity 2: have arrange of objects and thought shower words to describe the object- use feely bag to hide the objects and children to use their senses to describe- create a word bank of words to use to describe properties of materials.</p> <p>Activity 3: Choose object and describe the different properties of the object/ material.</p>	<p>Activity 1: classify object and material -Venn Diagram and cut and stick objects to classify / real objects to classify.</p> <p>Activity 2: Write sentences about labelling which is the object, and which is the material.</p>	<p>Science Reasoning: metal is shiny ...</p>

			
<p>4) Which material is waterproof?</p> <p>Science Capital: What do you have that might be waterproof? Why is that helpful?</p> <p>Science Working scientifically Skills: Comparative</p>  	<p>Science Reasoning task: Explorify: Fantastic Fibres: What is happening in the video? Discuss the appearance, where they might be found and what they do.</p> <p>Activity 1: Plan together how to investigate which material of clothing would be waterproof- come up with a question.</p> <p>Activity 2: Prediction – discuss the concept cartoon, who do you agree with most and why?</p> <p>Activity 3: What equipment will be needed to complete the experiment?</p> <p>Activity 4: Discuss how the experiments are to be conducted and write a list of numbered steps.</p> <p>Activity 5: Carry out experiments and record results in prepared table.</p> <p>Activity 6- Discuss what the results show and what they found out- answer the enquiry question.</p>	<p>Activity 1, 2,3:4 – Floor book to record ideas and suggestions.</p> <p>Activity 5: prepared table for pupils to complete, differentiated.</p> <p>Activity 6- Sentence stem to complete for conclusion.</p>	<p>Science Reasoning: I think ... because</p>
<p>5) Can we classify different materials?</p> <p>Science Capital: Do you know where we get different materials from?</p> <p>Science Working scientifically Skills: classify/ observing</p>	<p>Science Reasoning task: Explorify: Spinning Yarn- Show video of sheep being shorn and journey of wool. Discuss, where different materials come from.</p> <p>Activity 1: Classify different materials in different material types/ some choosing their own criteria. (Waterproof and not waterproof)</p> <p>Activity 2: Classify different materials in different material types/ some choosing their own criteria. (Magnetic and non-magnetic)</p>	<p>Activity 1,- Venn Diagrams and objects or picture cards to classify. (Possible water and pipette to test out)</p> <p>Activity 2: Venn Diagrams and objects or picture cards to classify.</p> <p>Activity 3- Venn Diagrams and objects or picture cards</p>	<p>Science Reasoning: I think ... because</p> <p>Assessment: Using prior knowledge from previous lessons to know properties of materials to help with classification.</p>

	<p>Activity 3: Classify different materials in different material types/ some choosing their own criteria. (wood, plastic, glass, metal etc)</p>	<p>to classify. (Magnets to use to help classification)</p>	
<p>6) Which material is best to build a house out of?</p> <p>Science Capital: Which fabric do you wear in the winter? Which fabrics do you wear in the summer?</p> <p>Science Working scientifically Skills: Engineering skills</p>  	<p>Science Reasoning task: Explorify: Dressed for the weather: Discuss why different materials are more suitable for wearing in different weather conditions.</p> <p>Assessment: Activity 1: Share problem with children of building a house with chosen materials – thought shower what a house needs to be. Activity 2: Plan and note down the resources to be used. Activity 3: Create using resources Activity 4: Evaluate the designs created and modify where necessary.</p>	<p>Activity 2 /3/4: Plan and note down the resources to be used on prepared sheet.</p>	<p>Assessment: Using prior knowledge from previous lessons to know properties of materials to help with creating a house. Describing the different properties of the materials used.</p>