



## Whitley Lodge First School – Progression Skills in SCIENCE

	Asking Questions	Measuring and Recording	Concluding	Evaluating
EYFS	<p>I comment &amp; ask questions about aspects of my familiar world, such as the place I live or the natural world.</p> <p>I talk about &amp; ask questions re the features of my immediate environment.</p> <p>I talk about &amp; ask questions re how environments might vary from one another e.g. Beach/Briardene.</p>	<p>I talk about some of the things I have observed such as plants, animals, natural and found objects.</p> <p>I can develop an understanding of growth, decay and changes over time.</p> <p>I look closely at <u>similarities, differences, patterns and change</u> e.g. when growing beans.</p> <p>I can describe the properties of some materials and sort them into groups.</p> <p>I can investigate which objects float/sink.</p>	<p>I can talk about <i>why</i> things happen and <i>how</i> things work.</p> <p>I make observations of animals and plants, explaining <i>why</i> some things occur.</p> <p>I can talk about similarities and differences in relation to places, objects, materials &amp; living things.</p> <p>I can suggest some of the purposes that different materials are used for.</p>	<p>I can say what worked/didn't work.</p> <p>I can suggest what I might try next.</p>
	<p><b>Ongoing Skills</b></p> <p>I ask questions about the world around me including: places, plants, objects and living things.</p> <p>I can make simple observations of places, plants, objects and living things.</p> <p>I can find out things by using my senses to investigate (<i>link to seasonal change</i>).</p> <p>I can say what I think might happen next.</p> <p>I can say what I have found out.</p> <p>I can say why I think things happen.</p>			
	<p><b>Key Vocabulary</b></p> <p><b>Naming body parts:</b> body, head, shoulders, neck, arms, legs etc</p> <p><b>Senses:</b> sight, touch, smell, hearing, taste</p> <p><b>Seasons:</b> Autumn, Winter, Spring, Summer, weather, hot, warm, cool, cold, sun, rain, wind, snow, ice, frozen, melt,</p> <p><b>Plants:</b> grow, seed, soil, shoot, stem, leaves, plant, flower, petals, sun, water, living</p> <p><b>Animals:</b> alive, living, food, water, breathe, naming animals <i>e.g. minibeasts &amp; sea creatures</i></p> <p><b>Objects:</b> hard/soft, rough/smooth, shiny/dull, prickly, spiky, stretchy, fluffy, magnetic/non-magnetic</p> <p><b>STEM:</b> predict, test, observe/watch, float, sink, push, pull, twist, spin, slide, spring, bounce, fast, slow</p>			<p><b>Key Questions?</b></p> <p>Which part of the body . . . . ?</p> <p>What can you see/hear/feel/smell/taste?</p> <p>What do you notice about . . . ?</p> <p>What's the same? What's different?</p> <p>I wonder what would happen if . . . . ?</p>
Y1	-I can ask about similarities and differences	-I can find out by watching, listening, tasting, smelling and touching. -I can make accurate measurements. -I can use a branching database programme.	-I can notice patterns and relationships, with support.	-I can explain what I have found out using scientific vocabulary.
	<p><b>Ongoing Skills</b></p> <p>I can ask simple scientific questions</p> <p>I can use simple equipment to make observations</p> <p>I can carry out simple tests, recording and communicating their findings.</p> <p>I can identify and classify things, comparing and contrasting their features.</p> <p>I can suggest what I have found out.</p>			
	<p><b>Key Vocabulary</b></p> <p>question, answer, observe, observing, equipment, sort, diagram, chart, describe, group</p>			<p><b>Key Questions?</b></p> <p>What is alive?</p> <p>What are bodies and what can they do?</p> <p>Do living things change or stay the same?</p> <p>What are living things made from?</p> <p>How are the seasons the same / different?</p> <p>What happens to (ice, jelly, chocolate) when it is heated or cooled?</p>

Y2	-I can use information from books and online sources to ask and answer questions.	-I can classify items into groups according to a range of criteria I have been given. -I can suggest more than one way to group items.	-I can identify what I have found out and how I discovered it.	-I can say whether things happened as I expected and if not why not.
<b>Ongoing Skills</b> I can ask simple scientific questions I can use simple equipment to make observations I can carry out simple tests, recording and communicating their findings. I can identify and classify things, comparing and contrasting their features. I can suggest what I have found out.				
<b>Key Vocabulary</b> identify, classify, data, compare, contrast, biology, chemistry, physics, record			<b>Key Questions?</b> What is alive, dead or was never alive? What does a plant need in order to survive? What do animals, including humans, need in order to survive? Can living things live forever? How do we choose materials? Can we alter materials? Which materials cannot be changed back after being heated, cooled, bent, stretched or twisted.	
Y3	-I can make decisions, asking and answering questions and using different types of scientific enquiry to answer them.	-I can records and present what I have found using scientific language, drawings, labelled diagrams, bar charts and tables.	-I can use my findings to draw simple conclusions.	-I can suggest how I could improve my enquiry if I did it again – with support.
<b>Ongoing Skills</b> -I can use observations and knowledge to ask and answer questions. -I can set up a simple enquiry to explore a scientific question. -I can set up a test to compare two things. -I can set up a fair test and explain why it is fair. -I can make careful and accurate observations, using standard units. -I can use equipment, including thermometers and data loggers to make measurements. -I can gather, record, classify and present data in different ways to answer questions. -I can use diagram, keys, bar charts and tables. -I can draw conclusions and suggest improvements. -I can make a prediction with a reason. -I can identify similarities, differences and changes related to an enquiry. -I can use appropriate and accurate scientific vocabulary.				
<b>Key Vocabulary</b> <b>Research</b> - relevant questions, fair test, careful observations, measurements <b>Equipment</b> – thermometer <b>Data</b> – gather, record, present <b>Record</b> drawings, labelled diagrams, keys, tables <b>Oral and Written Explanations</b> - conclusion, predictions, differences, similarities, changes, keys,			<b>Key Questions?</b> Are all rocks the same? What can magnets do? Why is a balanced diet important? How do living things work? How does a plant transport water? What so all living things need different things to survive? What is the purpose of a skeleton / exoskeleton?	

<b>Y4</b>	-I can plan and carry out a scientific enquiry by controlling variables fairly and accurately.	-I can record more complex data and results using scientific diagrams, classification keys, tables, bar charts, line graphs and models.	-I can report findings from scientific enquiries through written explanations and conclusions.	-I can use test results to make further predictions and set up further comparative tests.
<p><b>Ongoing Skills</b></p> <ul style="list-style-type: none"> <li>-I can use observations and knowledge to ask and answer questions.</li> <li>-I can set up a simple enquiry to explore a scientific question.</li> <li>-I can set up a test to compare two things.</li> <li>-I can set up a fair test and explain why it is fair.</li> <li>-I can make careful and accurate observations, using standard units.</li> <li>-I can use equipment, including thermometers and data loggers to make measurements.</li> <li>-I can gather, record, classify and present data in different ways to answer questions.</li> <li>-I can use diagram, keys, bar charts and tables.</li> <li>-I can draw conclusions and suggest improvements.</li> <li>-I can make a prediction with a reason.</li> <li>-I can identify similarities, differences and changes related to an enquiry.</li> <li>-I can use appropriate and accurate scientific vocabulary.</li> </ul>				
<p><b>Key Vocabulary</b></p> <p><b>Research</b> - scientific enquiry, comparative test, systematic, accurate measurements</p> <p><b>Equipment</b> – data logger</p> <p><b>Data</b> –classify</p> <p><b>Record</b> - bar charts</p> <p><b>Oral and Written Explanations</b> - changes, evidence, improve, secondary sources, guides, construct, interpret</p>			<p><b>Key Questions?</b></p> <p>Is water always wet? (process of evaporation and condensation)</p> <p>Can we control electricity?</p> <p>How do we hear different sounds?</p> <p>Living Things: what's the same and what's different?</p> <p>What do our bodies do with the food we eat?</p> <p>Are living things dangerous?</p> <p>How can changes to the environment endanger living things?</p> <p>Can the change in temperature directly impact materials?</p>	