

# Year 3 Working scientifically



## Prior and future learning

Prior Knowledge...	What's next?
<ul style="list-style-type: none"> <li>Ask simple questions that can be tested, e.g. about the local environment and how organisms depend on each other.</li> <li>Suggest different ways of answering a question, e.g. testing the suitability of materials for different purposes.</li> <li>Examine carefully, e.g. using a hand lens.</li> <li>Conduct simple tests, e.g. setting up comparative tests to show that plants need water and light.</li> <li>With assistance, draw and label diagrams, e.g. recording plants changing over time, starting from seed or bulb.</li> <li>Identify and group key outcomes from enquiry, e.g. describing conditions in different habitats and how these affect the numbers and types of organisms.</li> <li>Collect data relevant to the answering of questions, e.g. seeing how the shapes of some materials can be changed.</li> <li>Answer enquiry questions using data and ideas, e.g. to help decide how the properties of certain materials make them suitable for certain applications.</li> </ul>	<ul style="list-style-type: none"> <li>Develop relevant, testable questions, e.g. based on observations of animals.</li> <li>Plan investigations using different types of scientific enquiry.</li> <li>Set up comparative and fair tests, e.g. finding patterns in the sounds made by elastic bands of different thicknesses.</li> <li>Use various equipment, as instructed, repeatedly and with care.</li> <li>Recognise the importance of using standard units and measures accurately..</li> <li>Use words and diagrams to record findings..</li> <li>Use various ways to record evidence.</li> <li>Use various ways to record, group and display evidence, e.g. grouping and classifying various materials.</li> <li>Write a conclusion based on evidence.</li> <li>Present findings either in writing or orally.</li> <li>Recognise patterns that relate to scientific ideas.</li> <li>Use evidence to produce a simple conclusion.</li> <li>Use evidence to suggest further relevant investigations.</li> </ul>

## Track your learning

Skill	How I will show what I've learned			
Plan	I can, with support, develop relevant testable questions.			
	I can plan an enquiry e.g. fair testing, sorting or comparing.			
	I can set up a comparative test.			
Do	I can use a variety of equipment as instructed.			
	I can use standard measurements.			
Record	I can, with prompting, draw and label diagrams and use tables.			
	I can, with prompting, gather and display evidence in a variety of ways.			
Report	I can, with prompting, write a conclusion to an investigation.			
	I can suggest how findings from an investigation can be reported.			
Review	I can, with prompting, recognise patterns in the data.			
	I can, with support, use evidence to produce simple conclusions.			
	I can suggest how an investigation could be extended.			

**Key knowledge I need to understand (different types of enquiry)**

<p><b>CAPTAIN PEEKO</b> Spotting patterns everywhere!</p> <p>Pattern seeking</p>	<p><b>BILLY BOOKHEAD</b> He's got all the facts!</p> <p>Research using secondary sources</p>	<p><b>SUPERCYCLE</b> Making sure all's fair and right!</p> <p>Comparative and fair testing</p>	<p><b>SPY MAGNUS</b> Watching near and far!</p> <p>Observing over time</p>	<p><b>COMMANDER CLASSIFY</b></p> <p>Identifying, classifying and grouping</p>
--------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------	-------------------------------------------------------------------------------

## Vocabulary

<b>Classify</b>	To arrange things in categories according to shared characteristics or properties.
<b>Research</b>	To investigate to discover facts about a topic.
<b>Conclusion</b>	To summarize the main points of an experiment.
<b>Identify</b>	To establish what something is.
<b>Compare</b>	To draw an analogy between one thing and (another) for the purposes of explanation or clarification.
<b>Contrast</b>	To show how something is different in a science experiment.
<b>Biology</b>	The study of living organisms.
<b>Chemistry</b>	The study of chemicals and substances and what they're made up of.
<b>Physics</b>	The study of properties of matter and energy.
<b>Prediction</b>	To have an educated guess as to what may happen in an experiment.
<b>Interpret</b>	To understand something in a specified way.
<b>Evaluate</b>	To look at what could be made better.
<b>Properties</b>	Characteristics that mean we can sort different materials. E.g. the property of a material could be hard.
<b>Evidence</b>	Something used to support an argument or answer to an investigation.