

Working Scientifically progression at Oakworth Primary School

Nursery

	<u>Asking questions, planning and predicting</u>	<u>Testing, obtaining and observing</u>	<u>Identifying patterns and Evaluating</u>	<u>Recording</u>
Nursery	<ul style="list-style-type: none"> *Question why things happen *Comment and ask questions about their familiar world such as the place where they live or the natural world *Begin to anticipate key events 	<ul style="list-style-type: none"> *Closely observe what animals, people and vehicles do *Use senses to explore the world around them *Make simple observations 	<ul style="list-style-type: none"> *Uses talk to connect ideas, explain what is happening and anticipate what might happen next, recall and relive past experiences 	<ul style="list-style-type: none"> *Ascribe meaning to marks

Reception

	<u>Asking questions, planning and predicting</u>	<u>Testing, obtaining and observing</u>	<u>Identifying patterns and Evaluating</u>	<u>Recording</u>
Reception	<ul style="list-style-type: none"> *Question why things happen *Anticipate key events accurately and respond with relevant comments 	<ul style="list-style-type: none"> *Simple comparative vocabulary – bigger, smaller *Make observations independently and talk about them *General sensory observations of animals and plants *Simple descriptions of the world around them *Looking at objects and pictures and discussing what they can see 	<ul style="list-style-type: none"> *Use talk to clarify thinking and ideas *Noticing ‘which worked best’ – simple comparative statements *Answer initial question simply *Answer how and why questions about their experiences 	<ul style="list-style-type: none"> *Talking about objects and events *Simple recording – pictures/images *Attempt to write in meaningful contexts

Year 1 - Working Scientific to be woven through content Topics

	<u>Asking questions, planning and predicting</u>	<u>Testing, obtaining and observing</u>	<u>Identifying patterns and Evaluating</u>	<u>Recording</u>
Year 1	<ul style="list-style-type: none"> *To begin to ask simple questions and begin to recognise that they can be answered in different ways 	<ul style="list-style-type: none"> *To begin to observe closely, using simple equipment *To begin to carry out simple tests *To begin to use observations and or ideas to suggest answers to questions 	<ul style="list-style-type: none"> *To begin to identify and classify 	<ul style="list-style-type: none"> *To begin to gather and record data to answer questions



Year 2- Working Scientific to be woven through content Topics				
Year 2	<u>Asking questions, planning and predicting</u>	<u>Testing, obtaining and observing</u>	<u>Identifying patterns and Evaluating</u>	<u>Recording</u>
	*Confidently ask simple questions and recognise that they can be answered in different ways	*Confidently observe closely, using simple equipment *Confidently carry out simple tests *Confidently use observations and or ideas to suggest answers to questions	*Confidently identify and classify	*Confidently gather and record data to answer questions
Year 3 - Working Scientific to be woven through content Topics				
Year 3	<u>Asking questions, planning and predicting</u>	<u>Testing, obtaining and observing</u>	<u>Identifying patterns and Evaluating</u>	<u>Recording</u>
	*Begin to ask relevant questions but use different types of enquiry to answer them	*Begin to set up simple practical enquiries, comparative and fair tests *Begin to make systematic and careful observations *When appropriate, begin to take accurate measurements using standard units e.g. thermometers and data loggers	*Begin to use results to make simple conclusions, make predictions for new values, suggest improvements and raise further questions *Begin to identify similarities, differences or changes to simple scientific ideas or processes *Begin to use straightforward scientific evidence to answer questions or to support their findings	*Begin to gather, record, classify and present data in a variety of ways to help in answering questions *Begin to record findings using simple scientific language e.g. drawings, labelled diagrams, keys, bar charts and tables *Begin to report findings from enquiries (oral and written, displays and conclusions)



Year 4 - Working Scientific to be woven through content Topics				
Year 4	Asking questions, planning and predicting	Testing, obtaining and observing	Identifying patterns and Evaluating	Recording
	<ul style="list-style-type: none"> *Confidently ask relevant questions but use different types of enquiry to answer them 	<ul style="list-style-type: none"> *Confidently set up simple practical enquiries, comparative and fair tests *Confidently make systematic and careful observations *When appropriate, confidently take accurate measurements using standard units e.g. thermometers and data loggers 	<ul style="list-style-type: none"> *Confidently use results to make simple conclusions, make predictions for new values, suggest improvements and raise further questions *Confidently identify similarities, differences or changes to simple scientific ideas or processes *Confidently use straightforward scientific evidence to answer questions or to support their findings 	<ul style="list-style-type: none"> *Confidently gather, record, classify and present data in a variety of ways to help in answering questions *Confidently record findings using simple scientific language e.g. drawings, labelled diagrams, keys, bar charts and tables *Confidently report findings from enquiries (oral and written, displays and conclusions)
Year 5 - Working Scientific to be woven through content Topics				
Year 5	Asking questions, planning and predicting	Testing, obtaining and observing	Identifying patterns and Evaluating	Recording
	<ul style="list-style-type: none"> *Begin to plan different types of enquiry to answer questions *Begin to recognise and control variables where necessary 	<ul style="list-style-type: none"> *Begin to take measurements with a range of equipment *Begin to increase accuracy and precision *Take repeat readings where appropriate 	<ul style="list-style-type: none"> *Begin to use test results to make predictions for further comparative and fair tests *Begin to identify scientific evidence used to support or refute ideas or arguments 	<ul style="list-style-type: none"> *Begin to record data and results with scientific diagrams, labels, keys, tables, bar and line graphs *Begin to report and present findings from enquiries, including conclusions, causal relationships and explanations of results, in oral and written forms such as displays and other presentations



Year 6 - Working Scientific to be woven through content Topics				
Year 6	<u>Asking questions, planning and predicting</u>	<u>Testing, obtaining and observing</u>	<u>Identifying patterns and Evaluating</u>	<u>Recording</u>
	<ul style="list-style-type: none"> *Confidently plan different types of enquiry to answer questions *Confidently recognise and control variables where necessary 	<ul style="list-style-type: none"> *Confidently take measurements with a range of equipment *Confidently increase accuracy and precision. Take repeat readings where appropriate 	<ul style="list-style-type: none"> *Confidently use test results to make predictions for further comparative and fair tests *Confidently identify scientific evidence used to support or refute ideas or arguments 	<ul style="list-style-type: none"> *Confidently record data and results with scientific diagrams, labels, keys, tables, bar and line graphs *Confidently report and present findings from enquiries, including conclusions, causal relationships and explanations of results, in oral and written forms such as displays and other presentations