

The Priory Catholic Voluntary Academy
Working Scientifically Progression Ladders

	FS2	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Ideas and Evidence	I can make observations of animals and plants and explain why some things occur, and talk about changes. (UW ELG)	<p>Consider Variables and Ideas: I can join in when we talk about science. (1.1) I can join in when we talk about science and ask simple questions. (1.2) I can join in when we talk about science and ask some scientific questions. (1.3)</p>	<p>Consider Variables and Ideas: I can use other people's ideas to help me find out about something. (2.1) I can use information texts to help me find out about scientific ideas. (2.2) Importance of Collecting Evidence: I can decide whether I agree or disagree with my friends. (2.3+)</p>	<p>Consider Variables and Ideas: I can contribute my own ideas about how to find things out. (3.1) I can use information texts to help me find out about and explain scientific ideas. (3.2) Importance of Collecting Evidence: I am beginning to see the importance of collecting evidence to prove my ideas. (3.3)</p>	<p>Consider Variables and Ideas: I am beginning to understand that scientists' ideas are based on evidence. (4.2) I can identify differences, similarities or changes related to simple scientific ideas and processes. (4.3) Importance of Collecting Evidence: I can recognise why I need to collect evidence to prove my ideas are correct. (4.1) I am beginning to explain why it is important to test my ideas using observations or measurements to prove a theory. (4.3+)</p>	<p>Consider Variables and Ideas: I can decide which ideas can be investigated scientifically and decide how to find the answers (test or research). (5.1) I know that scientists' ideas are based on evidence. (5.2) Importance of Collecting Evidence: I can explain why it is important to test my ideas using observations or measurements to prove a theory. (5.3) I know that some people think they know the answer but they may not always have the proof they need to support their ideas. (5.3+)</p>	<p>Consider Variables and Ideas: I can find information from a range of sources in order to answer scientific questions (web, text, data etc). (6.1) I know that scientists sometimes use evidence to prove unlikely theories. (6.3+) Consider Ideas and the Importance of Collecting Evidence: I can describe and evaluate my own and other people's scientific ideas, including ideas that have changed over time- using evidence from a range of sources. (6.2) I can evaluate scientific ideas and I know that some people may arrive at different ideas from the same information. (6.3)</p>
Planning:	I can answer 'how' and 'why' questions about their	Raising questions: I can ask simple questions beginning	Raising questions:	Raising questions:	Raising questions: I can ask relevant scientific questions	Raising questions: I can think of a relevant question to	Raising questions: I can think of a relevant question to

	<p>experiences and in response to stories or events. (U ELG)</p> <p>I can use past, present and future forms accurately when talking about events that have happened or are to happen in the future. (S 40-60)</p> <p>I can develop their own narratives and explanations by connecting ideas or events. (S40-60)</p>	<p>with Why...? What if...? (1.1)</p> <p>Approach: With help I can make suggestions about how to do things when we plan a science activity. (1.2)</p> <p>Prediction: I can say what I think will happen. (1.3)</p>	<p>I can ask my own questions about our science topic. (2.1)</p> <p>Approach: I can use simple equipment provided to carry out a simple comparative test. (2.2)</p> <p>I can share ideas about how to collect data and answer questions. (2.3)</p> <p>Prediction: I can say whether or not I was surprised by what happened. (2.2+)</p> <p>Choosing Variables: With help I can suggest what to change and I am beginning to spot when a test is unfair. (2.3+)</p>	<p>I can ask relevant scientific questions. (3.1)</p> <p>Approach: I can use a range of simple equipment provided to carry out simple tests. (3.2)</p> <p>I can make my own suggestions about how to carry out a simple fair test. (3.3)</p> <p>Prediction: I can predict what might happen because I have seen something similar. (3.2)</p> <p>Choosing Variables: I can name the variable that changes in a fair test (the independent variable). (3.3+)</p>	<p>that will help me find out more about our science topic. (4.1)</p> <p>Approach: I can confidently use a range of simple equipment provided including a thermometer. (4.2)</p> <p>I can make my own suggestions about how to carry out a simple test, identifying equipment needed. (4.3)</p> <p>Prediction: I can predict what might happen because I have seen or read about something similar. (4.2)</p> <p>Choosing Variables: I can name the (independent) variable that changes in a fair test and (constant) variables that stay the same. (4.3)</p>	<p>investigate using my scientific knowledge and understanding. (5.1)</p> <p>Approach: I can choose suitable equipment and information from sources provided when planning different types of scientific enquiry. (5.1)</p> <p>I can decide how to organise the steps needed to carry out a science activity when planning different types of scientific enquiry. (5.2)</p> <p>Prediction: I can link my prediction to my scientific understanding because I have seen/read about something similar before. (5.2)</p> <p>Choosing Variables: I can plan a fair test and decide which variable to change (independent), which to keep the same (constant) and which to measure (dependent). (5.3)</p>	<p>investigate using my scientific knowledge and understanding. (6.1)</p> <p>Approach: I can select suitable equipment and information from a range of sources provided when planning different types of scientific enquiry. (6.1)</p> <p>I can independently identify the steps needed to carry out a range of different types of scientific enquiry. (6.2)</p> <p>Prediction: I can make predictions based upon my scientific knowledge and understanding – using patterns in data to predict further results. (6.2)</p> <p>Choosing Variables: I can confidently plan a fair test and decide which variables to change (independent), which to keep the same (constant) and which to measure (dependent). (6.3)</p>
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<p>Gathering and Presenting Evidence:</p>	<p>Observe: I can make observations of animals and plants and explain why some things occur, and talk about changes. (UW ELG)</p>	<p>Observe and Measure: I can describe what I hear, see, touch, taste or smell. (1.1) I can use my observations to group things. (1.1) Observe: I can use simple equipment to make observations. (1.2) Record: I can draw and/or use simple pictures to help me record observations. (1.2) Present: I can talk about what happened and what I saw using some scientific language. (1.3)</p>	<p>Observe and Measure: I can make simple observations and use non-standard and simple standard measurements. (2.1) Observe: I can identify, group and classify things, observing similarities and differences. (2.2) I can observe changes over time. (2.3) Record: I can record my results in a range of ways including grids and charts. (2.3) Present: I can share what I have found out by talking, drawing and/or writing – using simple scientific vocabulary. (2.2)</p>	<p>Observe and Measure: I can make accurate observations using simple standard measurements. (3.1) Observe: I can use a simple key to help me make observations. (3.3) Record: I can record my results in a range of ways including drawings, bar charts, tables and labelled drawings. (3.2) Present: I can use evidence I have collected to share what I have found out by talking, drawing and/or writing – using simple scientific vocabulary. (3.3)</p>	<p>Observe and Measure: I can choose to make relevant observations, systematically and accurately measure using standard units: time, length, weight and temperature. (4.1) I am beginning to use a datalogger to measure and record results. (4.2) Observe: I can use a simple key to help me make observations, sort and classify. (4.3) Record: I can record my results in a range of ways including drawings, bar charts, tables and labelled drawings and with support line graphs. (4.2) Present: I can use evidence I have collected to support a presentation to my peers about what I have found out. (4.3)</p>	<p>Observe and Measure: I can take measurements using a range of scientific equipment, using standard units with accuracy and precision. (5.1) I can observe over a period of time, identifying and predicting further results. (5.2) I can use a datalogger. (5.2) Observe: I am beginning to recognise the importance of repeat readings. (5.3) Record: I can record my results in a wide variety of ways: simple keys, labelled diagrams, tables, bar charts, Venn diagrams and I'm beginning to use line graphs. (5.1) I can record my results independently, in a variety of ways: simple keys, labelled diagrams, tables, bar charts, Venn diagrams and I'm beginning to use line graphs. (5.2)</p>	<p>Observe and Measure: I can use a datalogger to measure and record results. (6.1) I understand how to use a key to classify and identify. (6.1) I can make a series of precise appropriate observations, comparisons or measurements using standard units. (6.2) Observe: I recognise the importance of repeat readings. (6.3) Record: I can record my results in a wide variety of ways: simple keys, labelled diagrams, tables, bar charts, Venn diagrams, scatter graphs, line graphs etc. (6.1) I can record my observations and measurements in an organised, systematic way that helps me see patterns. (6.2) Present: I can plot data as a line graph and with help can draw a line of best fit. (6.1)</p>
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<p>Thinking About Evidence and Evaluating:</p>	<p>I can confidently speak in a familiar group, will talk about my ideas, and will choose the resources I need for my chosen activities. (SCSA ELG)</p> <p>I can take account of one another's ideas about how to organise my activity. (MR ELG)</p> <p>I can use past, present and future forms accurately when talking about events that have</p>	<p>Conclude and Explain: I can say what I think happened in a simple test. (1.1)</p> <p>I notice some similarities and differences. (1.2)</p> <p>I am beginning to use simple data to answer questions. (1.3)</p>	<p>Conclude and Explain: I can make simple comparisons beginning to use science words. (2.1)</p> <p>I can explain what information in a bar chart or table shows. (2.2)</p> <p>With help I can begin to see a pattern in results. (2.2)</p> <p>I can notice and explain some patterns in results. (2.3)</p>	<p>Conclude and Explain: I can explain my observations using scientific vocabulary. (3.1)</p> <p>I can begin to explain a simple pattern in my results. (3.2)</p> <p>Evaluation: I can talk about possible improvements to my investigations. (3.3)</p> <p>Validity:</p>	<p>Conclude and Explain: I can use straightforward scientific evidence to answer questions and support findings. (4.1)</p> <p>I can draw simple conclusions, make predictions for new values. (4.2)</p> <p>I can identify and explain simple patterns in my results. (4.2)</p> <p>Evaluation:</p>	<p>Conclude and Explain: Using data in tables and bar charts I can explain some patterns in results and I am beginning to interpret a line graph. (5.1)</p> <p>I use appropriate scientific language to communicate my findings. (5.1)</p> <p>I can link my conclusions to any patterns in my results and I am beginning to make links using</p>	<p>Conclude and Explain: Using data in tables and bar charts I can explain some patterns in results and I can interpret a line graph. (6.1)</p> <p>Using evidence from a science activity I can link my conclusions to my scientific knowledge and understanding. (6.1)</p> <p>I can explain causal relationships and</p>

	<p>happened or are to happen in the future. (S ELG)</p>		<p>Evaluation: I know when things have gone wrong. (2.3+) I can say if I was surprised or not by what happened. (2.3+)</p>	<p>I am beginning to spot an unusual result. (3.3+)</p>	<p>I can talk about and begin to give reasons for possible improvements to my investigations – and raise further questions. (4.3) Validity: I can identify and begin to explain an unusual result. (4.3+)</p>	<p>my scientific knowledge and understanding. (5.2) I can explain my findings, report conclusions and causal relationships in oral and written forms such as displays and other presentations. (5.2) Evaluation: I can explain how and why I need to improve an investigation. (5.3) I can raise further questions that could be investigated based on data and observations. (5.3) Validity: I can spot an unusual result, giving a reason why I think it might have happened. (5.3+)</p>	<p>patterns in my results. (6.2) I try to explain when I get one very different result. (6.2) Explain and Evaluate: I can use test results to make predictions, to raise questions and set up further comparative tests. (6.2) Evaluation: I can say how and why I could improve the way I carried out an investigation, and I know the value of repeat testing. (6.3) Validity: I can take repeat measurements that help me check the accuracy of my results. (6.3) I can explain the degree of trust in results. (6.3+)</p>
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