Fowey Primary School
Science Skills Progression Map

		EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		Explore the natural world around them, making observations and drawing pictures	• 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		• asking relevant questions and using different types of scientific enquiries to answer them • setting up simple practical enquiries, comparative and fair tests • making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers • gathering, recording, classifying and presenting data in a variety of ways to help in answering questions • recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables • reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions • using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions		• planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary • taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate • recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs • using test results to make predictions to set up further comparative and fair tests • reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations • identifying scientific evidence that has been used to support or refute ideas or arguments	

					• identifying differences, similarities or changes related to simple scientific ideas and processes • using straightforward scientific evidence to answer questions or to support their findings.			
Planning Investigations	Skills	Asking simple questions.	Asking simple questions. Suggest different ways of answering a question.	Asking simple questions. Suggest different ways of answering a question.	Can name 3 each of Independent, Dependent and Control Variables. Can construct questions from chosen variables. Can identify variables in questions. Can make and justify a prediction. Can list the equipment needed to carry out an investigation Can write a method for an investigation.	Can name 3 each of Independent, Dependent and Control Variables. Can construct questions from chosen variables. Can identify variables in questions. Can make and justify a prediction. Can list the equipment needed to carry out an investigation Can write a method for an investigation.	Can name 3 each of Independent, Dependent and Control Variables. Can construct questions from chosen variables. Can identify variables in questions. Can make and justify a prediction. Can list the equipment needed to carry out an investigation Can write a method for an investigation.	Can name 3 each of Independent, Dependent and Control Variables. Can construct questions from chosen variables. Can identify variables in questions. Can make and justify a prediction. Can list the equipment needed to carry out an investigation Can write a method for an investigation.

							Can identify risks and mitigation procedures associated with an investigation.	Can identify risks and mitigation procedures associated with an investigation.	Can identify risks and mitigation procedures associated with an investigation.
								Can produce a full plan for an investigation.	Can produce a full plan for an investigation.
Data gathering	Skills	Making and recording simple observations. Studying patterns	Making observations using simple language. Making observations using keyword vocabulary.	Making observations using simple language. Making observations using keyword vocabulary.	Can list the types of data that can be gathered in investigations. Can complete provided results tables. Draw and complete own results tables. With help, draw a graph with an appropriate scale on the axes. Identifying trends in the data gathered from investigations	Can list the types of data that can be gathered in investigations. Can complete provided results tables. Draw and complete own results tables. With help, draw a graph with an appropriate scale on the axes. Identifying trends in the data gathered from investigations	Can list the types of data that can be gathered in investigations. Can complete provided results tables. Draw and complete own results tables. With help, draw a graph with an appropriate scale on the axes. Draw own graphs from data gathered in investigations.	Can list the types of data that can be gathered in investigations. Can complete provided results tables. Draw and complete own results tables. With help, draw a graph with an appropriate scale on the axes. Draw own graphs from data gathered in investigations.

| | | | | | | | Write conclusions | Identifying trends in the data gathered from investigations

Write conclusions | Identifying trends in the data gathered from investigations

Write conclusions

Produce a full data report |

| Evaluation of Investigations | Skills | Similarities and differences

Identifying and classifying | Answering questions using simple language

Answering questions using keyword vocabulary.

Noticing patterns and relationships | Answering questions using simple language

Answering questions using keyword vocabulary.

Noticing patterns and relationships

Explaining some of the things observed using keyword vocabulary | State the trend in the results.

State whether the trend matched the prediction.

Explain how the trend matched, or didn't match, the prediction.

List the criteria needed to decide whether results gathered are valid or not.

Explain whether results gathered were valid or not.

Spot anomalies in the results gathered.

Explain the reason for any anomalies in the data.

Suggest how the method could be improved to obtain valid data. | State the trend in the results.

State whether the trend matched the prediction.

Explain how the trend matched, or didn't match, the prediction.

List the criteria needed to decide whether results gathered are valid or not.

Explain whether results gathered were valid or not.

Spot anomalies in the results gathered.

Explain the reason for any anomalies in the data.

Suggest how the method could be improved to obtain valid data. | State the trend in the results.

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Suggest how the method could be improved to obtain valid data. | State the trend in the results.

State whether the trend matched the prediction.

Explain how the trend matched, or didn't match, the prediction.

List the criteria needed to decide whether results gathered are valid or not.

Explain whether results gathered were valid or not.

Spot anomalies in the results gathered.

Explain the reason for any anomalies in the data.

Suggest how the method could be improved to obtain valid data. |
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					Suggest new questions that are related to the original investigation	Suggest new questions that are related to the original investigations Design an investigation that could produce similar results.	Suggest new questions that are related to the original investigations Design an investigation that could produce similar results. Produce a full scientific report, including planning, data and evaluation.	Suggest new questions that are related to the original investigations Design an investigation that could produce similar results. Produce a full scientific report, including planning, data and evaluation.