F1	PLAN		DO			REVIEW				
	To ask scientific questions	**To plan an enquiry**	**To observe closely**	**To take measurements**	**To gather/record results**	**To present results**	**To interpret results**	**To draw conclusions**	**To make a prediction**	**To evaluate an enquiry**
Identify and classify	Begin to ask questions to find out more	Begin to ask 'why' questions Begin to choose the right resources to carry out their own plan	Begin to use new vocabulary Begin to talk about what they see using a wide vocabulary			Begin to describe a sequence of events, real or fictional using words such as 'first' Begin to draw information from a single map		Children in F1 are not expected to draw conclusions. They are expected to make observations which will help them to begin to answer questions. They do not have the subject knowledge to give reasons for what they observe so they cannot draw scientific conclusions.	Children in F1 are not expected to make scientific predictions as they do not have the subject knowledge to do this. That does not mean that you should not ask children what they think may happen, but this will be based on experience or may simply be a guess.	Children in F1 are not expected to evaluate.
Pattern seeking			Begin to compare quantities using language 'more than, fewer than	Begin to develop their small motor skills so that they can use a range of tools competently, safely and confidently	Begin to make comparisons between objects relating to size, length, weight and capacity		Begin to articulate their ideas and thoughts in simple language			
Comparative/ fair testing										
Observing over time	Begin to talk about what they see using a wide vocabulary									
Research using secondary sources										

Further information can be found in the 'skills' section of the EYFS Progression map

F2	PLAN		DO			REVIEW				
	To ask scientific questions	**To plan an enquiry**	**To observe closely**	**To take measurements**	**To gather/record results**	**To present results**	**To interpret results**	**To draw conclusions**	**To make a prediction**	**To evaluate an enquiry**
Identify and classify	Ask questions to find out more	Ask 'why' questions Choose the right resources to carry out their own plan	Use new vocabulary Talk about what they see using a wide vocabulary			Write short sentences with words with known sound letter correspondence Describe a sequence of events, real or fictional using words such as 'first' Draw information from a single map		Children in F2 are not expected to draw conclusions. They are expected to make observations which will help them to begin to answer questions. They do not have the subject knowledge to give reasons for what they observe so they cannot draw scientific conclusions.	Children in F2 are not expected to make scientific predictions as they do not have the subject knowledge to do this. That does not mean that you should not ask children what they think may happen, but this will be based on experience or may simply be a guess.	Children in F2 are not expected to evaluate.
Pattern seeking			Compare quantities using language 'more than, fewer than	Develop their small motor skills so that they can use a range of tools competently, safely and confidently	Make comparisons between objects relating to size, length, weight and capacity		Articulate their ideas and thoughts in simple language			
Comparative /fair testing										
Observing over time	Talk about what they see using a wide vocabulary									
Research using secondary sources										

Further information can be found in the 'skills' section of the EYFS Progression map

Yr 1	PLAN		DO			REVIEW				
	To ask scientific questions	**To plan an enquiry**	**To observe closely**	**To take measurements**	**To gather/record results**	**To present results**	**To interpret results**	**To draw conclusions**	**To make a prediction**	**To evaluate an enquiry**
Identify and classify	Begin to ask a Yes/No questions to aid sorting	Begin to identify the headings for the two groups (it is …., it is not ….)	Begin to compare objects based on obvious, observable features e.g. size, shape, colour, texture etc.			Begin to sort objects and living things into two group using a basic Venn diagram or simple table	Talk to a partner about the number of objects in each group i.e. which has more or less	Children in KS1 are not expected to draw conclusions. They are expected to make observations which will help them to answer questions. They do not have the subject knowledge to give reasons for what they observe so they cannot draw scientific conclusions.	Children in KS1 are not expected to make scientific predictions as they do not have the subject knowledge to do this. That does not mean that you should not ask children what they think may happen, but this will be based on experience or may simply be a guess.	Children in KS1 are not expected to evaluate. However, children should be encouraged to consider their method and adapt this where necessary.
Research using secondary sources	Begin to ask one or two simple questions linked to a topic					Begin to present what they have learnt verbally or using pictures	Begin to answer their questions using simple sentences			
Comparative/fair testing	Begin to identify the question to investigate from a scenario or choose a question from a range provided	Begin to choose equipment to use and decide what to do and what to observe or measure in order to answer the question	Begin to make observations linked to answering the question	When appropriate, measure using non-standard units	Begin to record data in simple prepared tables, pictorially or by taking photographs	Present what they learnt verbally, using pictures or block diagrams	Begin to answer their question in simple sentences using their observations or measurements			
Observing over time	Begin to ask a question about what might happen in the future based on an observation				Begin to record data in simple prepared tables, pictorially or by taking photographs	Present what they learnt verbally to a partner or using pictures				
Pattern seeking	Begin to ask a question that is looking for a pattern based on observations				Begin to record data in simple, prepared tables, marking a line or drawing a symbol for every occurrence of a pattern	Present what they learnt verbally to a partner				

Yr 2	PLAN		DO			REVIEW				
	To ask scientific questions	**To plan an enquiry**	**To observe closely**	**To take measurements**	**To gather/record results**	**To present results**	**To interpret results**	**To draw conclusions**	**To make a prediction**	**To evaluate an enquiry**
Identify and classify	Be able to ask a Yes/No questions to aid sorting	Identify the headings for the two groups (it is …., it is not ….)	Be able to compare objects based on obvious, observable features e.g. size, shape, colour, texture etc.			Sort objects and living things into two group using a basic Venn diagram or simple table	Talk about the number of objects in each group i.e. which has more or less	Children in KS1 are not expected to draw conclusions. They are expected to make observations which will help them to answer questions. They do not have the subject knowledge to give reasons for what they observe so they cannot draw scientific conclusions.	Children in KS1 are not expected to make scientific predictions as they do not have the subject knowledge to do this. That does not mean that you should not ask children what they think may happen, but this will be based on experience or may simply be a guess.	Children in KS1 are not expected to evaluate. However, children should be encouraged to consider their method and adapt this where necessary.
Research using secondary sources	Ask one or two simple questions linked to a topic					Present what they have learnt verbally or using pictures	Be able to answer their questions using simple sentences			
Comparative/fair testing	Identify the question to investigate from a scenario or choose a question from a range provided	Choose equipment to use and decide what to do and what to observe or measure in order to answer the question	Make observations linked to answering the question	When appropriate, measure using standard units where all the numbers are marked on the scale	Record data in simple prepared tables, pictorially or by taking photographs	Present what they learnt verbally, using pictograms or block diagrams	Answer their question in simple sentences using their observations or measurements			
Observing over time	Ask a question about what might happen in the future based on an observation				Record data in simple prepared tables, pictorially or by taking photographs	Present what they learnt verbally or using pictures				
Pattern seeking	Ask a question that is looking for a pattern based on observations				Record data in simple, prepared tables and tally charts	Present what they learnt verbally				

Yr 3	PLAN		DO			REVIEW				
	To ask scientific questions	**To plan an enquiry**	**To observe closely**	**To take measurements**	**To gather/record results**	**To present results**	**To interpret results**	**To draw conclusions**	**To make a prediction**	**To evaluate an enquiry**
Identify and classify	Be able to ask a range of Yes/No questions to aid sorting	Begin to be able to put appropriate headings onto intersecting Venn and Carroll diagrams	Begin to be able to compare objects based on more sophisticated, observable features. Begin to present observations in labelled diagrams.			Begin to sort objects and living things into groups using intersecting Venn and Carroll diagrams	Begin to spot patterns in the data	Begin to draw simple conclusions, when appropriate, for patterns e.g. a flying insect with no legs might always crash land		Begin to suggest improvement e.g. a wider range of objects – only looked at British trees. Suggest new questions arising from the investigation.
Research using secondary sources	Ask a range of questions linked to a topic	Choose a source from a small range provided				Present what they learnt verbally or using labelled diagrams	Begin to use simple scientific language to answer their questions			Begin to suggest limitations e.g. only had one book. Suggest new questions arising from the investigation.
Comparative /fair testing		Decide what to change and what to measure or observe	Make observations linked to answering the question	Measure using standard units where not all the numbers are marked on the scale	Prepare own tables to record data	Begin to present data in bar charts	Begin to refer to their evidence when answering their question	Where appropriate provide oral explanations for their findings	Begin to use results from an investigation to make a prediction about a further result	Begin to suggest improvements e.g. to method of taking measurements. Suggest new questions arising from the investigation.
Observing over time		Begin to decide what to measure or observe. Decide how often to take a measurement.	Make a range of relevant observations	Measure using standard units where not all the numbers are marked on the scale.		Begin to present data in time graphs				
Pattern seeking		Begin to decide what to measure or observe	Make observations linked to answering the question	Measure using standard units where not all the numbers are marked on the scale.		Begin to use ICT package to present data as a scattergram				

Yr 4	PLAN		DO			REVIEW				
	To ask scientific questions	**To plan an enquiry**	**To observe closely**	**To take measurements**	**To gather/record results**	**To present results**	**To interpret results**	**To draw conclusions**	**To make a prediction**	**To evaluate an enquiry**
Identify and classify	Be able to ask a range of Yes/No questions to aid sorting	Be able to put appropriate headings onto intersecting Venn and Carroll diagrams	Be able to compare objects based on more sophisticated, observable features. Present observations in labelled diagrams.			Sort objects and living things into groups using intersecting Venn and Carroll diagrams	Spot patterns in the data particularly two criteria with no examples e.g. there are no living things with wings and no legs	Draw simple conclusions, when appropriate, for patterns e.g. a flying insect with no legs might always crash land		Suggest improvement e.g. a wider range of objects – only looked at British trees. Suggest new questions arising from the investigation.
Research using secondary sources	Ask a range of questions linked to a topic	Choose a source from a range provided				Present what they learnt verbally or using labelled diagrams	Be able to answer their questions using simple scientific language			Suggest limitations e.g. only had one book. Suggest new questions arising from the investigation.
Comparative /fair testing		Decide what to change and what to measure or observe	Make observations linked to answering the question	Measure using standard units where not all the numbers are marked on the scale, and take repeat readings where necessary	Prepare own tables to record data	Present data in bar charts	Refer directly to their evidence when answering their question	Where appropriate provide oral or written explanations for their findings	Use results from an investigation to make a prediction about a further result	Suggest improvements e.g. to method of taking measurements. Suggest new questions arising from the investigation.
Observing over time		Decide what to measure or observe. Decide how often to take a measurement.	Make a range of relevant observations	Measure using standard units where not all the numbers are marked on the scale. Use dataloggers to measure over time.		Present data in time graphs				
Pattern seeking		Decide what to measure or observe	Make observations linked to answering the question	Measure using standard units where not all the numbers are marked on the scale.		Use ICT package to present data as a scattergram				

Yr 5	PLAN		DO			REVIEW				
	To ask scientific questions	**To plan an enquiry**	**To observe closely**	**To take measurements**	**To gather/record results**	**To present results**	**To interpret results**	**To draw conclusions**	**To make a prediction**	**To evaluate an enquiry**
Identify and classify	Be able to ask a range of Yes/No questions to aid sorting and begin to decide which ways of sorting will give useful information	Begin to identify specific clear questions that will help to sort without ambiguity	Be able to compare based on physical properties. Begin to compare based on knowledge gained through previous enquiry			Begin to create branching databases (tree diagrams) and keys to enable others to name livings things and objects	Be able to talk about the features that objects and living things share and do not share based on the information in the key etc.	Be able to use data to show that livings things and materials that are grouped together have more things in common than with things in other groups		Begin to be able to explain using evidence that the branching database or classification key will only work for the living things or materials it was created for
Research using secondary sources	Ask a range of questions and begin to recognise that some can be answered through research and others may not	With support, choose suitable sources to use without any limitations				Present what they learnt in a range of ways e.g. different graphic organisers	With support, be able to answer their questions using scientific evidence gained from a range of sources			Begin to be able to talk about their degree of trust in the sources they used
Comparative /fair testing	Ask a range of questions and begin to identify the type of enquiry that will help to answer the questions. Begin to ask further questions based on results.	Begin to recognise and control variables where necessary	Make observations linked to answering the question	Begin to measure using standard units using equipment that has scales involving decimals	Prepare own tables to record data. Begin to include columns for taking repeat readings	Begin to independently choose an appropriate form of presentation, including line graphs	Begin to be able to answer their question, describing causal relationships	Provide oral or written explanations for their findings	Begin to use test results to make predictions for further investigations	Begin to be able to explain their degree of trust in their results e.g. precision in taking measurements, variables that may not have been controlled, and accuracy of results
Observing over time					Prepare own tables to record data		Be able to answer their questions, describing the change over time			
Pattern seeking						Begin to choose an appropriate form of presentation, including scatter graphs	Be able to answer their questions identifying patterns			

Yr 6	PLAN		DO			REVIEW				
	To ask scientific questions	**To plan an enquiry**	**To observe closely**	**To take measurements**	**To gather/record results**	**To present results**	**To interpret results**	**To draw conclusions**	**To make a prediction**	**To evaluate an enquiry**
Identify and classify	Be able to ask a range of Yes/No questions to aid sorting and decide which ways of sorting will give useful information	Identify specific clear questions that will help to sort without ambiguity	Be able to compare not only based on physical properties but also on knowledge gained through previous enquiry			Create branching databases (tree diagrams) and keys to enable others to name livings things and objects	Be able to talk about the features that objects and living things share and do not share based on the information in the key etc.	Be able to use data to show that livings things and materials that are grouped together have more things in common than with things in other groups		Be able to explain using evidence that the branching database or classification key will only work for the living things or materials it was created for
Research using secondary sources	Ask a range of questions recognising that some can be answered through research and others may not	Choose suitable sources to use				Present what they learnt in a range of ways e.g. different graphic organisers	Be able to answer their questions using scientific evidence gained from a range of sources			Be able to talk about their degree of trust in the sources they used
Comparative /fair testing	Ask a range of questions and identify the type of enquiry that will help to answer the questions. Ask further questions based on results.	Recognise and control variables where necessary	Make observations linked to answering the question	Measure using standard units using equipment that has scales involving decimals	Prepare own tables to record data, including columns for taking repeat readings	Choose an appropriate form of presentation, including line graphs	Be able to answer their question, describing causal relationships	Provide oral or written explanations for their findings	Use test results to make predictions for further investigations	Explain their degree of trust in their results e.g. precision in taking measurements, variables that may not have been controlled, and accuracy of results
Observing over time					Prepare own tables to record data		Be able to answer their questions, describing the change over time			
Pattern seeking						Choose an appropriate form of presentation, including scatter graphs	Be able to answer their questions identifying patterns			