Sacred Heart Catholic Primary School

Progression in Working Scientifically							
	EYFS	**Key Stage 1**		**Lower Key Stage 2**		**Upper Key Stage 2**	
	Science at Foundation Stage is introduced indirectly through activities that encourage children to explore, problem solve, observe, predict, think, make decisions and talk about the world around them.	To use the following scientific methods, processes and skills **(adult support may be needed**).	To use the following scientific methods, processes and **skills with increasing confidence.**	To use the following scientific methods, processes and skills (adult support may be needed).	To use the following scientific methods, processes and skills (adult support may be needed).	To use the following scientific methods, processes and skills (adult support may be needed).	To use the following scientific methods, processes and skills (adult support may be needed).
Asking questions	**Explore and talk about different forces they can feel** **Explore and respond to different natural phenomena in their setting and on trips.** Understand simple questions about 'who', 'what' and 'where' (but generally not 'why'). Understand a question or instruction that has two parts, Comments and asks questions about aspects of their familiar world such as the place where they live or the natural	Ask simple **questions about the world around us.** Begin to recognise different ways in which the might answer scientific questions	Ask simple **questions about the world around us.** Begin to recognise different ways in which the might answer scientific questions	Ask some **relevant questions and use** different **types of scientific enquiries** to answer them. Begin to raise their own questions about the world around them. Begin to make some decisions about which types of enquiry will be the best way of answering questions including observing changes over time, noticing patterns, grouping and classifying, carrying	Ask some **relevant questions and use** different **types of scientific enquiries** to answer them. Raise their own questions about the world around them. Make some decisions about which types of enquiry will be the best way of answering questions including	Use their **scientific experiences** to explore ideas and **raise different kind of questions.** Begin to explore and talk about ideas, ask their own questions about scientific phenomena, analyse functions, relationships and interactions more systematically. Begin to select the most appropriate ways to answer	Use their **scientific experiences** to explore ideas and **raise different kind of questions.** Explore and talk about ideas, ask their own questions about scientific phenomena, analyse functions, relationships and interactions more systematically. Select the most appropriate ways to answer science questions using different types of

	world **(30-50mths, UtW The World)** Talk about why things happen and how things work **(30-50mths, UtW The World)** Respond to what they have heard, expressing their thoughts and feelings. **(30-50mths, UtW The World)** Use a wider range of vocabulary. Understand a question or instruction that has two parts, Understand 'why' questions, like: "Why do you think the caterpillar got so fat?" **(30-50mths, UtW The World)** Ask questions to find out more and to check they understand what has			out simple comparative **and fair tests**, finding things out using secondary sources.	observing changes over time, noticing patterns, grouping and classifying, carrying out simple comparative **and fair tests**, finding things out using secondary sources.	science questions using different types of scientific enquiry (including observing changes over different periods of time, noticing patterns, grouping and classifying, carrying out comparative and fair tests and finding things out using a wide range of secondary sources of information.)	scientific enquiry (including observing changes over different periods of time, noticing patterns, grouping and classifying, carrying out comparative and fair tests and finding things out using a wide range of secondary sources of information.)

	been said to them. (**40-60 months)**						
	I am beginning to ask a simple question about the world around me. I can talk about the differences between materials and changes they notice.	I can ask a few simple questions about the world around us.	I can ask a few simple questions about the world around us.	I can ask some relevant questions about the world around us. I can use some different types of scientific enquiry to answer questions.	I can ask relevant questions about the world around us. I can use different types of scientific enquiry to answer questions.	I am beginning to explore ideas and ask my own questions about scientific phenomena.	I can explore ideas and ask my own questions about scientific phenomena.
	I am exploring and thinking about the world around me. I understand the need to respect and care for the natural environment and all living things	I can begin to use some different types of enquiry to answer questions.	I can begin to use some different types of enquiry to answer questions.	I am beginning to decide which type of enquiry is best to answer my question.	I am beginning to decide which type of enquiry is best to answer my question.	I am beginning to plan different types of scientific enquiry to answer questions.	I can plan different types of scientific enquiry to answer questions.
	EYFS	**Key Stage 1**		**Lower Key Stage 2**		**Upper Key Stage 2**	
Developing Enquiry **Planning and setting up different types of enquires**	Talk about what they see, using a wide vocabulary. Use all their senses in hands-on exploration of natural materials. Develop manipulation and control.	Experience different types of science enquiries, including practical activities (different types of	Experience different types of science enquiries, including practical activities (different types of	Be given a range of scientific enquiries including different types of scientific enquiries to answer questions Begin to explore everyday phenomena and the	Be given a range of scientific enquiries including different types of scientific enquiries to answer questions Explore everyday phenomena and	Talk about how ideas have developed over time. Begin to recognise some more abstract ideas and begin to recognise how these ideas help	Talk about how ideas have developed over time. Begin to recognise more abstract ideas and begin to recognise how these ideas help them to

	Explore different materials and tools. **(22-36months)** Explore natural materials, indoor and outdoor. Explore different materials freely, in order to develop their ideas about how to use them and what to make. **(30- 50 months)** Develop their own ideas and then decide which materials to use to express them. Join different materials and explore different textures. **(30- 50 months)** Explore different materials freely, in order to develop their ideas about how to use them and what to make. **(30-50 months)**	enquiry including - observing changes over time, noticing patterns, grouping and classifying, carrying out simple comparative tests, finding things out from secondary sources).	enquiry including - observing changes over time, noticing patterns, grouping and classifying, carrying out simple comparative tests, finding things out from secondary sources).	relationships between living things and familiar environments. Begin to develop their ideas about functions, relationships and interactions. Set up simple practical enquiries Recognise when a simple fair test is necessary and help to decide how to set it up	the relationships between living things and familiar environments. Begin to develop their ideas about functions, relationships and interactions. Set up simple practical enquiries	them to understand how the world operates. Begin to recognise scientific ideas change and develop over time. Begin to select and plan the most appropriate ways to answer science questions using different types of scientific enquiry (including observing changes over different periods of time, noticing patterns, grouping and classifying, carrying out comparative and fair tests and finding things out using a wide range of secondary sources of information.) Begin to recognise when and how to set up comparative and fair tests and explain which	understand how the world operates. Begin to recognise scientific ideas change and develop over time. Select and plan the most appropriate ways to answer science questions using different types of scientific enquiry (including observing changes over different periods of time, noticing patterns, grouping and classifying, carrying out comparative and fair tests and finding things out using a wide range of secondary sources of information.) Recognise when and how to set up comparative and fair tests and explain which variables need to be controlled and why

	Select and use activities and resources, with help when needed. This helps them to achieve a goal they have chosen, or one which is suggested to them. Articulate their ideas and thoughts in well-formed sentences. Connect one idea or action to another using a range of connectives. Use talk to help work out problems and organise thinking and activities explain how things work and why they might happen. Return to and build on their previous learning, refining ideas and developing their ability to					variables need to be controlled and why	

	represent them**. (40-60 months)** •						
	I can explore the world around me.	I can begin to use some different types of enquiry to answer questions.	I can begin to use some different types of enquiry to answer questions.	I am beginning to decide which type of enquiry is best to answer my question.	I am beginning to decide which type of enquiry is best to answer my question.	I am beginning to plan different types of scientific enquiry to answer questions. I am beginning to decide which variables to control.	I can plan different types of scientific enquiry to answer questions. I can decide which variables to control.
	EYFS	**Key Stage 1**		**Lower Key Stage 2**		**Upper Key Stage 2**	
Performing test	Explore how things work. Explore collections of materials with similar and/or different properties. Plant seeds and care for growing plants. Repeat actions that have an effect. Explore materials with different properties. Explore natural materials, indoors and outside.	Carry out simple tests with support. To begin to discuss my ideas about how to find things out. To begin to say what happened in my investigation.	Carry out simple tests. To discuss my ideas about how to find things out. To say what happened in my investigation.	Begin to set up simple practical enquiries, comparative and fair tests Begin to recognise when a simple fair test is necessary and help to decide how to set it up. Begin to think of more than one variable factor.	Set up simple practical enquiries, comparative and fair tests. Recognise when a simple fair test is necessary and help to decide how to set it up Can think of more than one variable factor.	Begin to select and plan the most appropriate ways to answer science questions using different types of scientific enquiry (including observing changes over different periods of time, noticing patterns, grouping and classifying, carrying out comparative and fair tests and finding things out using a wide range of secondary	Select and plan the most appropriate ways to answer science questions using different types of scientific enquiry (including observing changes over different periods of time, noticing patterns, grouping and classifying, carrying out comparative and fair tests and finding things out using a wide range of secondary sources of information.)

	Explore natural materials, indoors and outside **(22-36months)** Explore and respond to different natural phenomena in their setting and on trips. Make connections between the features of their family and other families. Notice differences between people. **(22-36 months UTW)** Explore material with different properties **(22-36 months UTW)** Use all their senses in hands on exploration of natural materials **(30-35 months UTW)** Repeat actions that have an effect. Explore materials with different properties. Explore natural materials, indoors and outside. Explore how things work. **(30-50 months UTW)**					sources of information.) Begin to recognise when and how to set up comparative and fair tests and explain which variables need to be controlled and why. **Begin to suggest** improvements to my method and give reasons. Begin to decide when it is appropriate to do a fair test.	Use test results to make predictions to set up further comparative and fair tests. Recognise when and how to set up comparative and fair tests and explain which variables need to be controlled and why Suggest improvements to my method and give reasons. Decide when it is appropriate to do a fair test.

	Plant seeds and care for growing plants. **(30-50 months)** Understand the key features of the life cycle of a plant and an animal. **(30- 50 months)** Describe what they see, hear and feel whilst outside. Explore the natural world around them **(40- 60 months)** Continue, copy and create repeating patterns. **(40-60 months)**						
	I am exploring the world around me.	I can begin to perform simple tests. I can begin to discuss my ideas. I can begin to say what happened in an investigation.	I can perform simple tests. I can discuss my ideas. I can say what happened in an investigation.	I can set up some simple practical enquiries. Including comparative and fair tests. I am beginning to help decide which variables to keep the same and which to change.	I can set up simple practical enquiries. Including comparative and fair tests. I can help decide which variables to keep the same and which to change.	I can sometimes set up a range of comparative and fair tests. I am beginning to explain which variables need to be controlled and why. I am beginning to suggest improvements to	I can set up a range of comparative and fair tests. I can explain which variables need to be controlled and why. I can suggest improvements to my test, giving reasons.

						my test, giving reasons.	
Reporting, presenting and communicating data and findings	Understand the key features of the life cycle of a plant and an animal. Begin to understand the need to respect and care for the natural environment and all living things. Express ideas and feelings through making marks, and sometimes give a meaning to the marks they make. **(22-36 months)** Talk about what they see, using a wide vocabulary. Develop their communication, but may continue to have problems with irregular	Gather and record data with some adult support, to help in answering questions. Begin to record simple data. Begin to record and communicate their findings in a range of ways. Can show my results in a simple table that my teacher has provided.	Gather and record data to help in answering questions. Record simple data. Record and communicate their findings in a range of ways. Can show my results in a table that my teacher has provided.	Gather, record, and begin to classify and present data in a variety of ways to help in answering questions. Begin to record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables. Begin to report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. Begin to use notes, simple tables and standard units and help to decide how to record and analyse their data.	Gather, record, classify and present data in a variety of ways to help in answering questions. Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables. Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. Use notes, simple tables and standard units and help to decide how to record and	Begin to record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables and bar and line graphs. Begin to report and present findings from enquiries. Begin to decide how to record data from a choice of familiar approaches. Begin to choose how best to present data.	Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables and bar and line graphs. Report and present findings from enquiries. Decide how to record data from a choice of familiar approaches. Can choose how best to present data.

	tenses and plurals, **(30-50 months)** Describe what they see, hear and feel whilst outside. **(40-60 months)** Continue, copy and create repeating patterns. **(40-60 months)**			Begin to record results in tables and bar charts.	analyse their data. Can record results in tables and bar charts.		
	I can talk about what I see.	I can begin to collect simple data. I can begin to record data in a table my teacher has provided. I can begin to communicate my findings in a variety of ways.	I can collect simple data. I can record data in a table provided. I can communicate my findings in a variety of ways.	I am beginning to collect data in a variety of ways, including labelled diagrams, bar charts and tables. I am beginning to help decide how to record data. I am beginning to communicate findings using simple scientific language.	I can collect data in a variety of ways, including diagrams, bar charts and tables. I can help decide how to record data. I can communicate using simple scientific language	I am beginning to record data and results of increasing complexity using – scientific diagrams and labels, classification keys , tables ,bar graphs, line graphs I am beginning to choose how best to present data. I am beginning to communicate findings using detailed scientific language.	I can record data and results of increasing complexity using – scientific diagrams and labels classification keys tables bar graphs line graphs I can choose how best to present data. I can communicate findings using detailed scientific language.

Observing and measuring	Understand the key features of the life cycle of a plant and an animal. Begin to understand the need to respect and care for the natural environment and all living things Talk about the differences between materials and changes they notice. Notices detailed features of objects in their environment **(22-36 mths, UtW)** Notice patterns and arrange things in patterns**.(22-36 months M)** Observes the effect of exercise on their bodies **(30-50mths, PD (Health and Self-care)** Make comparisons between objects relating to size, length, weight and capacity.	With support, begin to notice patterns and relationships Begin to use simple measurements and equipment (e.g. hand lenses, egg timers) to gather data	With guidance, begin to notice patterns and relationships Use simple measurements and equipment (e.g. hand lenses, egg timers) to gather data	Begin to look for naturally occurring patterns and relationships and decide what data to collect to identify them. Begin to take accurate measurements using standard units Learn how to use a range of (new) equipment, such as data loggers / thermometers appropriately	Look for naturally occurring patterns and relationships and decide what data to collect to identify them. Take accurate measurements using standard units Learn how to use a range of (new) equipment, such as data loggers / thermometers appropriately.	Begin to look for different causal relationships in their data and identify evidence that refutes or supports their ideas. Begin to choose the most appropriate equipment to make measurements with increasing precision and explain how to use it accurately. Take repeat measurements where appropriate.	Look for different causal relationships in their data and identify evidence that refutes or supports their ideas. Choose the most appropriate equipment to make measurements with increasing precision and explain how to use it accurately. Take repeat measurements where appropriate.

	Make comparisons between objects relating to size, length, weight and capacity. Talk about and identifies the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs' etc. **(30-50 months)** Compare length, weight and capacity. **(40-60 months)** Compare length, weight and capacity. Continue, copy and create repeating patterns. **(40-60 months)**						
Identifying and Classifying	Talk about the differences between materials and changes they notice. Notice patterns and arrange things in patterns**.(22-36 months M)**	Begin to use simple features to compare objects, materials and living things and, with help, decide	Use simple features to compare objects, materials and living things and, with help, decide	Begin to talk about criteria for grouping, sorting and classifying; and use simple keys Begin to identify differences,	talk about criteria for grouping, sorting and classifying; and use simple keys	Begin to use and develop keys and other information records to identify, classify and describe living things and materials.	Use and develop keys and other information records to identify, classify and describe living things and materials.

	Make comparisons between objects relating to size, length, weight and capacity. Make comparisons between objects relating to size, length, weight and capacity. Talk about and identifies the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs' etc. **(30-50 months)** Compare length, weight and capacity. Continue, copy and create repeating patterns. **(40-60 months)** Recognise some environments that are different to the one in which they live. Describe what they see, hear and feel whilst outside.	how to sort and group them (identifying and classifying) Identify and classify with some support. To begin to observe and identify, compare and describe. To begin to use simple features to compare objects, materials and living things and, with help, decide how to sort and group them.	how to sort and group them (identifying and classifying) Identify and classify. Observe and identify, compare and describe. Use simple features to compare objects, materials and living things and, with help, decide how to sort and group them.	similarities or changes related to simple scientific ideas and processes. Begin to talk about criteria for grouping, sorting and classifying and use simple keys. Begin to compare and group according to behaviour or properties, based on testing.	Identify differences, similarities or changes related to simple scientific ideas and processes. Talk about criteria for grouping, sorting and classifying and use simple keys. Compare and group according to behaviour or properties, based on testing	Begin to identify patterns that might be found in the natural environment.	Identify patterns that might be found in the natural environment.

	Look closely at similarities, differences, patterns and change **(40-60mths UtW The World)**						
	I can compare objects.	I can begin to identify a variety of objects, materials and living things. I can begin to compare, sort and group a range of objects, materials and living things.	I can identify a variety of objects, materials and living things. I can compare, sort and group a range of objects, materials and living things	I am beginning to talk about and identify differences and similarities in the properties or behaviour of living things, materials and other scientific phenomena. I am beginning to identify simple changes related to simple scientific phenomena. I am beginning to discuss criteria for grouping and sorting and can classify using simple keys.		I am beginning to use keys and other information records to classify and describe living things, materials and other scientific phenomena. I am beginning to develop my own keys and other information records to classify and describe. I am beginning to identify changes related to scientific phenomena.	I can use keys and other information records to classify and describe living things, materials and other scientific phenomena. I can develop my own keys and other information records to classify and describe. I can identify changes related to scientific phenomena.
Gathering and recording data	Repeat actions that have an effect. Explore materials with different properties.	Begin to record simple data. Begin to observe closely using simple	Record simple data. Observe closely using simple	Begin to collect and record data from their own observations and	Collect and record data from their own observations and	Begin to decide how to record data and results of increasing complexity	Decide how to record data and results of increasing complexity from a choice of familiar approaches:

	Explore natural materials, indoors and outside. Compare sizes, weights etc. using gesture and language - 'bigger/ little/smaller', 'high/low', 'tall', 'heavy'. (22-36 months) Notice patterns and arrange things in patterns**.(22-36 months M)** Make comparisons between objects relating to size, length, weight and capacity. Make comparisons between objects relating to size, length, weight and capacity. Talk about and identifies the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs' etc. **(30-50 months)**	equipment with help, observe changes over time.	equipment with help, observe changes over time.	measurements in a variety of ways: notes, bar charts and tables, standard units, drawings, labelled diagrams, keys and help to make decisions about how to analyse this data Begin to make systematic and careful observations Help to make decisions about what observations to make, how long to make them for and the type of simple equipment that might be used	measurements in a variety of ways: notes, bar charts and tables, standard units, drawings, labelled diagrams, keys and help to make decisions about how to analyse this data. Make systematic and careful observations Help to make decisions about what observations to make, how long to make them for and the type of simple equipment that might be used	from a choice of familiar approaches: scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs. Begin to make their own decisions about what observations to make, what measurements to use and how long to make them for	scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs. Make their own decisions about what observations to make, what measurements to use and how long to make them for.

	Compare length, weight and capacity. Continue, copy and create repeating patterns. **(40-60 months)** Recognise some environments that are different to the one in which they live. Describe what they see, hear and feel whilst outside. Look closely at similarities, differences, patterns and change **(40-60mths UtW The World)**						
Research	Comments and asks questions about aspects of their familiar world such as the place where they live or the natural world (30-50mths, UtW The World) Talk about why things happen and how things work **(30-50mths, UtW The World)** Respond to what they have heard, expressing their thoughts and	To begin to use simple secondary sources to find answers. To begin to find information to help me from books and computers with help	Use simple secondary sources to find answers. Can find information to help me from books and computers with help.	Begin to recognise when and how secondary sources might help to answer questions that cannot be answered through practical investigations.	loggers / thermometers appropriately	Begin to recognise which secondary sources will be most useful to research their ideas.	Recognise which secondary sources will be most useful to research their ideas.

	feelings**. (30-50mths, UtW The World)** Understand 'why' questions, like: "Why do you think the caterpillar got so fat?" **(30-50mths, UtW The World)** Explore the natural world around them. Ask questions to find out more and to check they understand what has been said to them. **(40-60 months)**						
	I can explore the world around me.	I can begin to find information to help me from books, computers and other familiar sources.	I can find information to help me from books, computers and other familiar sources.	I can begin to decide when research will help in my enquiry. I am beginning to carry out simple research on my own.		I am beginning to recognise which secondary source will be most useful to my research. I can begin to carry out research independently.	I can recognise which secondary source will be most useful to my research. I can carry out research independently.
Conclusions	Express preferences and decisions. They also try	With support, record and communicate their findings in	With some support, record and	I am beginning to use results to draw simple conclusions , make predictions for	Using results to draw simple conclusions , make predictions for	Am beginning to report and present findings from enquiries , including	Reporting and presenting findings from enquiries , including conclusions,

	new things and start establishing their autonomy.**(22-36 months PSE)** Be able to express a point of view and to debate when they disagree with an adult or a friend, using words as well as actions**.** Talk about the differences between materials and changes they notice**. (30-50 months)** Describe what they see, hear and feel whilst outside. • Understand the effect of changing seasons on the natural world around them. Recognise some environments that are different to the one in which they live. Think about the perspectives of others.	a range of ways and begin to use simple scientific language. Begin to talk about what they have found out and how they found it out. To begin to say what happened in my investigation. To begin to say whether I was surprised at the results or not. To begin to say what I would change about my investigation.	communicate their findings in a range of ways and begin to use simple scientific language. Talk about what they have found out and how they found it out. To say what happened in my investigation. To say whether I was surprised at the results or not. To say what would change about my investigation.	new values, suggest improvements and raise further questions. Begin to use relevant simple scientific language to discuss their ideas and communicate their findings in ways that are appropriate for different audiences, including oral and written explanations, displays or presentations of results and conclusions Am beginning to use straightforward scientific evidence to answer questions or to support their findings. With help, am beginning to look for changes, patterns, similarities and differences in their data in order to draw simple conclusions and	new values, suggest improvements and raise further questions. Use relevant simple scientific language to discuss their ideas and communicate their findings in ways that are appropriate for different audiences, including oral and written explanations, displays or presentations of results and conclusions Use straightforward scientific evidence to answer questions or to support their findings. With help, look for changes, patterns, similarities and differences in their data in order to draw simple	conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations. Use relevant scientific language and illustrations to discuss, communicate and justify their scientific ideas, Begin to use oral and written forms such as displays and other presentations to report conclusions, causal relationships and explanations of degree of trust in results. Begin to identify scientific evidence that has been used to support or refute ideas or arguments. Begin to draw conclusions based on their data and	causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations. Identify scientific evidence that has been used to support or refute ideas or arguments. Use oral and written forms such as displays and other presentations to report conclusions, causal relationships and explanations of degree of trust in results. Begin to identify scientific evidence that has been used to support or refute ideas or arguments. Draw conclusions based on their data and observations, use evidence to justify their ideas, use scientific knowledge

	Connect one idea or action to another using a range of connectives. Articulate their ideas and thoughts in well-formed sentences. Use talk to help work out problems and organise thinking and activities explain how things work and why they might happen. (**40-60 months)**			answer questions. With support, am beginning to identify new questions arising from the data, make new predictions and find ways of improving what they have already done. Am beginning to see a pattern in my results. Am beginning to say what I found out, **linking cause and effect.** Am beginning to say how I could make it better. Am beginning to answer questions from what I have found out.	conclusions and answer questions. With support, identify new questions arising from the data, make new predictions and find ways of improving what they have already done. Can see a pattern in my results. Can say what I found out, **linking cause and effect.** Can say how I could make it better.	observations, use evidence to justify their ideas, use scientific knowledge and understanding to explain their findings. Begin to use test results to make predictions to set up further comparatives and fair tests. Begin to look for different causal relationships in their data and identify evidence that refutes or supports their ideas. Use their results to identify when further tests and observations are needed. Begin to separate opinion from fact. Begin to draw conclusions and identify scientific evidence.	and understanding to explain their findings. Use test results to make predictions to set up further comparatives and fair tests. Look for different causal relationships in their data and identify evidence that refutes or supports their ideas. Use their results to identify when further tests and observations are needed. Separate opinion from fact. Can draw conclusions and identify scientific evidence. Can use simple models. Know which evidence proves a scientific point. Use test results to make predictions to set up further comparative and fair tests.

						Can use simple models. Know which evidence proves a scientific point. Begin to use test results to make predictions to set up further comparative and fair tests.	
	I can talk about the world around me.	I can begin to talk about what I have found out. I can begin to explain how I carried out my enquiry. I can begin to suggest simple changes to my enquiry.	I can talk about what I have found out. I can explain how I carried out my enquiry. I can suggest simple changes to my enquiry.	I am beginning to draw simple conclusions based on the results of my enquiry. I am beginning to answer my questions using the results of my enquiry. I am beginning to use my findings to make	I can draw simple conclusions based on the results of my enquiry. I can answer my questions using the results of my enquiry. I can use my findings to make new predictions suggest improvements and think of new questions.	I am beginning to come to scientific, conclusions using the results of an enquiry to justify my ideas. I am beginning to explain my conclusion using scientific knowledge and understanding. I am beginning to distinguish opinion and facts.	I can come to a scientific, conclusions using the results of an enquiry to justify my ideas. I can explain my conclusion using scientific knowledge and understanding. I can distinguish opinion and facts. I can use my findings to make predictions and set up further enquiries I can begin to use abstract models to

				new predictions, suggest improvements and think of new questions. I am beginning sometimes to think of cause and effect in my explanations.	I can begin to think of cause and effect in my explanations.	I am beginning to use my findings to make predictions and set up further enquiries. I can begin to use abstract models to explain my ideas.	explain my ideas.
Vocabulary	Copy what adults do, taking 'turns' in conversations (through babbling) and activities. Try to copy adult speech and lip movements**. (22-36 months)** Use a wider range of vocabulary. Engage in extended conversations about stories, learning new vocabulary. Talk about what they see, using a wide vocabulary.	Use some simple scientific language Begin to use some science words. Use comparative language with support.	Use simple scientific language and some science words. Use comparative language – bigger, faster etc	Begin to use some scientific language to talk and, later, write about what they have found out. Begin to use relevant scientific language. Begin to use comparative and superlative language.	Use some scientific language to talk and, later, write about what they have found out. Use relevant scientific language. Use comparative and superlative language	Am beginning to read, spell and pronounce scientific vocabulary correctly. Am beginning to use relevant scientific language and illustrations to discuss, communicate and justify scientific ideas. Am beginning to confidently use a range of scientific vocabulary.	Can use scientific ideas when describing simple processes. Can use the correct science vocabulary

	Use a wider range of vocabulary. **(30-50 months)** Learn new vocabulary. Use new vocabulary through the day. **(40-60 months)** Use new vocabulary in different contexts. Listen to and talk about selected non-fiction to develop a deep familiarity with new knowledge and vocabulary. Use new vocabulary in different contexts **(40-60 months)**					Am beginning to use conventions such as trend, rogue result, support prediction and -er word generalisation. Am beginning to use scientific ideas when describing simple processes. Am beginning to use the correct science vocabulary	
	I am learning new words.	I can begin to use simple scientific language. I can begin to describe what I see eg something is long. I can begin to compare eg something is	I can use simple scientific language. I can describe what I see. I can compare eg something is longer or shorter.	I am beginning to use some scientific language in my work. I am beginning to describe my observations and my findings. I am beginning to use comparative and superlative descriptions eg	I can use comparative and superlative descriptions eg longer / shorter than, longest / shortest. I can begin to describe cause and effect.	I am beginning to read, spell and pronounce scientific vocabulary correctly. I am beginning to confidently use the correct scientific language when appropriate. I am beginning to explain my ideas	I can read, spell and pronounce scientific vocabulary correctly. I can confidently use the correct scientific language when appropriate. I can explain my ideas with scientific reasons. I can use scientific conventions eg trends,

		longer or shorter.		longer / shorter than, longest / shortest. I can begin to describe cause and effect.		with scientific reasons. I am beginning to use scientific conventions eg trends, rogue result, support prediction.	rogue result, support prediction.
Understanding	Be able to express a point of view and to debate when they disagree with an adult or a friend, using words as well as actions**. (30-50 months)** Talk about what they see, using a wide vocabulary. **(30-50 months)** Respond to what they have heard, expressing their thoughts and feelings. **(30-50 months)**	Can begin to talk about how science helps us in our daily lives eg. torches and lights help us see hen it is dark. Am beginning to understand science can sometimes be dangerous.	Can talk about how science helps us in our daily lives eg. torches and lights help us see hen it is dark. Am beginning to understand science can sometimes be dangerous.	Begin to know which things in science have made our lives better. Can begin to understand risk in science	Knows which things in science have made our lives better. Can understand there is some risk in science.	Am beginning to talk about how scientific ideas have changed over time. Am beginning to explain the positive and negative effects of scientific development. Am beginning to see how science is useful in everyday life. Am beginning to say which parts of our lives rely on science.	Can talk about how scientific ideas have changed over time. Can explain the positive and negative effects of scientific development. Can see how science is useful in everyday life. Can say which parts of our lives rely on science.
	I can respond to what I see or hear.	I can say how science helps us in our daily lives. I can say how science can be	I can say how science helps us in our daily lives.	I am beginning to know which things in science have made our lives better eg computers	I know some things in science which have made our lives better eg computers in	I am beginning to see how science is useful in lots of different ways.	I can see how science is useful in lots of different ways.

		dangerous eg electricity can give you a shock.	I can say how science can be dangerous eg electricity can give you a shock.	in schools, hospitals etc I can begin to understand risk in science..	schools, hospitals etc I understand there is some risk in science..	I am beginning to say which parts of our lives rely on science. I am beginning to explain the positive and negative effects of scientific developments.	I can say which parts of our lives rely on science. I can explain the positive and negative effects of scientific developments.