Church of the Ascension C.E. Primary School

'Learn with love, flourish with faith.'

Curriculum Subject Progression Framework

Subject: Science

	EYFS	Year 1 and Year 2:	Year 3 and Year 4:	Year 5 and Year 6:
Questioning and enquiry planning (problem solving)	• Listen attentively and respond to what they hear with relevant questions, comments and actions when being read to and during whole class discussions and small group interactions • Make comments about what they have heard and ask questions to clarify their understanding • Ask questions to find out more and to check they understand what has been said to them • Use talk to help work out problems and organise thinking and activities and to explain how things work and why they might happen	• Explore the world around them and raise their own simple questions • Experience different types of science enquiries, including practical activities • Begin to recognise different ways in which they might answer scientific questions	• Raise their own relevant questions about the world around them • Should be given a range of scientific experiences including different types of science enquiries to answer questions • Start to make their own decisions about the most appropriate type of scientific enquiry they might use to answer questions	• Use their scientific experiences to explore ideas and raise different kinds of questions • Talk about how scientific ideas have developed over time • Select and plan the most appropriate type of scientific enquiry to use to answer scientific questions
Performing tests (comparative and fair testing)	• Explore the natural world around them	• Carry out simple tests	• 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	• Recognise when and how to set up comparative and fair tests • Explain which variables need to be controlled and why
Identifying, classifying and grouping.	• Know some similarities and differences between the natural world around them and contrasting environments, drawing on	• Use simple features to compare objects, materials and living things • With help, decide how to sort and group them	• Talk about criteria for grouping, sorting and classifying • Use simple keys	• Use and develop keys and other information records to identify, classify and describe living things and materials

	their experiences and what has been read in class			
Observing and measuring (observation over time)	• Describe what they see, hear and feel whilst outside • Understand the effect of changing seasons on the natural world around them • Explore the natural world around them, making observations and drawing pictures of animals and plants • Safely use and explore a variety of materials, tools and techniques	• Observe closely using simple equipment (eg hand lenses) • With help, observe changes over time • Use simple measurements and equipment (eg. egg timers)	• 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 • Take accurate measurements using standard units • Learn how to use a range of equipment (eg thermometers, Newton meters and data loggers etc)	• Make their own decisions about what observations to make, what measurements to use and how long to make them for • Choose the most appropriate equipment to make measurements with increasing precision and explain how to use it accurately • Take repeat measurements where appropriate
Gathering and recording data (pattern seeking)	• Share their creations explaining the process they have used	• Record simple data (pictorially and in tables)	• Decide what data to collect to identify patterns and relationships • Collect and record data from their own observations and measurements in a variety of ways (notes, bar charts, tables drawings and labelled diagrams • Help to make decisions about how to analyse this data	• Decide how to record data and results of increasing complexity from a choice of familiar approaches (scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs)
Pattern seeking.	• Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter	• With guidance, begin to notice patterns and relationships.	• Begin to look for naturally occurring patterns and relationships • With help, look for changes, patterns, similarities and differences in their data in order to draw simple conclusions and answer questions	• Identify patterns and relationships that might be found in the natural environment • Look for different causal relationships in their data and identify evidence that refutes or supports their ideas
Reporting, presenting and communicating data/findings	• Participate in small group, class and one to one discussion, offering their own ideas, using recently introduced vocabulary • Offer explanations for why things might happen, making use of recently introduced vocabulary from stories, non-fiction, rhymes and poems where appropriate • Articulate their ideas and thoughts in well-formed sentences	• Talk about what they have found out and how they found it out • Use their observations and ideas to suggest answers to questions • With help, record and communicate their findings in a range of ways	• Discuss their ideas and communicate their findings in ways that are appropriate for different audiences (e.g. diagrams, oral and written explanations, displays or presentations of results and conclusions • With support, identify new questions arising from the data, making predictions and finding ways of improving what they have already done	• Use illustrations to discuss, communicate and justify their scientific ideas • Use oral and written forms such as displays and other presentations to report conclusions, causal relationships and explanations of degree of trust in results • Use their results to make predictions and identify when further observations, comparative and fair tests might be needed

	• Hold conversation when engaged in back-and-forth exchanges with their teacher and peers			
Research using secondary sources.	• Engage in non-fiction books • Listen to and talk about selected non-fiction to develop a deep familiarity with new knowledge and vocabulary	• Ask people questions and use simple secondary sources to find answers	• Recognise when and how secondary sources might help them to answer questions that cannot be answered through practical investigations	• Recognise which secondary sources will be most useful to research their ideas and begin to separate opinion from fact • Identify scientific evidence that has been used to support or refute ideas or arguments
Vocabulary	• Use new vocabulary in different contexts	• Use simple scientific language • Begin to read and spell age-appropriate scientific vocabulary	• Use relevant simple scientific language • Read, spell and pronounce most scientific vocabulary correctly	• Use relevant scientific language • Read, spell and pronounce scientific vocabulary correctly