Whole School Science Overview Christ Church Primary School

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Working Scientifically throughout the year					
Nursery	**Understanding the World**	**Understanding the World**	**Understanding the World**	**Understanding the World**	**Understanding the World**	**Understanding the World**
Reception	**Understanding the World: Animal Adventures** **Changing Seasons Lesson 1 – end of Autumn 1** **Changing Seasons Lesson 2 – end of Autumn 2** **Working Scientifically-** Continuous Provision		**Understanding the World: I am a Scientist** **Changing Seasons Lesson 3 – end of Spring 1** **Changing Seasons Lesson 4 – end of Spring 2** **Working Scientifically –** Continuous Provision		**Understanding the World: Our beautiful planet** **Changing Seasons Lesson 5 – end of Summer 1** **Changing Seasons Lesson 6 – end of Summer 2** **Working Scientifically –** Continuous Provision	
Year 1	**Forces and Space: Seasonal Changes** **Working Scientifically** – To record data in a pictogram -To gather and record data in a pictogram	**Materials: Everyday Materials** **Working Scientifically** – To sort objects into groups based on the materials they are made from - To make observations and record data	**Animals: Sensitive Bodies** **Working Scientifically** - To sort body parts into groups. - To spot patterns in data. - To use the senses to make observations	**Animals: Comparing Animals** **Working Scientifically** - To research using non-fiction texts - To gather and record data to help in answering questions.	**Plants: Introduction to Plants** **Working Scientifically** - To plan an investigation. - To draw and label a diagram. - To sort flowers into groups. - To measure and compare leaves.	**Making Connections: Investigating Science through Stories** **Working scientifically** – To spot patterns in data -To carry out research to find specific information -To use a ruler to measure

		- To plan a test and suggest what might happen. - To answer questions based on results.	- To investigate how sound changes as you move further away		- To recognise that observations do not always match predictions. - To use observations to find answers to questions.	-To plan how to carry out a test
Year 2	**Living Things: Habitats** **Working Scientifically** – To classify objects into groups -To carry out research to find answers to questions	**Living Things: Micro-habitats** **Working Scientifically** - To classify a variety of minibeasts. - To recognise how scientists answer questions. - To gather and record data to answer a question. - To ask questions and plan how to carry out an experiment. -To carry out an experiment and record data in a table.	**Materials: Uses of Everyday Materials** **Working Scientifically** - To recognise that objects can be grouped - To record data in a table. - To gather data and use it to answer a question. - To record data in a block graph.	**Animals, including Humans: Life Cycles and Health** **Working Scientifically** - To use simple measuring equipment. - To use secondary sources to research - To make observations over time - To interpret collected results.	**Plants: Plant Growth** **Working Scientifically** - To plan comparative tests. -To measure with a ruler. - To record data in a table. - To observe using a magnifying glass. - To draw and label diagrams.	**Making Connections: Plant-based Materials** **Working Scientifically** – to group based on characteristics -To perform a test and gather data -To use observation to answer a simple question -To identify and classify living things
Year 3	**Animals: Movement and Nutrition** **Working Scientifically** – To group animals based on their physical properties -To measure and sort data	**Forces and Space: Forces and Magnets** **Working Scientifically** - To label a diagram using arrows and scientific vocabulary. - To write a scientific conclusion identifying cause and effect.	**Materials: Rocks and Soil** **Working Scientifically** - To observe the appearance of rocks closely, using a magnifying glass. - To make predictions, suggest improvements and explain	**Energy: Light and Shadows** **Working Scientifically** - To plan and draw a results table. - To ask testable questions and plan how to answer them - To evaluate a method.	**Plants: Plant Reproduction** **Working Scientifically** - To pose relevant questions. - To design simple results tables. -To plan a simple enquiry.	**Making Connections: Does Hand Span Affect Grip Strength?** **Working Scientifically** – To plan a pattern seeking enquiry -To gather and record data

	-To gather and compare data to answer questions -To record information using secondary sources	- To plan an investigation using variables. - To write a method. - To display data using a bar chart. -To research the uses of magnets	observations over time. - To present research on fossil formation. - To use the fossil record to answer questions about the past. -To record the drainage rate for different soils in a bar chart. - To draw and label a diagram.	- To find patterns in data and form conclusions.	- To complete, read and interpret data in a bar chart. - To identify and suggest changes to an enquiry. - To use results to draw conclusions.	-To conclude and evaluate the investigation -To use sets of data to inform design -To report on my findings using a shadow puppet display
Year 4	**Animals including Humans: Digestion and Food** **Working Scientifically** – To evaluate a model -To plan an enquiry by considering which variables should be changed, measured and collected -To classify animals based on their diet -To analyse trends and form conclusions using scientific knowledge -To construct a result table for recoding observation.	**Electricity and Circuits** **Working Scientifically** -To record and classify qualitative data -To draw a scientific diagram -To write a method -To pose questions and plan ways to test them -To explore how scientific advances inform safety advice	**States of Matter** **Working Scientifically** -To ask relevant questions about the properties of solids -To use results to draw simple conclusions about the properties of liquids -To use thermometers to take accurate measurements before and after melting -To make predictions for new values about evaporation rates -To record the stages of the water cycle using a labelled diagram	**Sound and Vibrations** **Working Scientifically** -To observe closely how different instruments create a sound -To research how whales and dolphins communicate underwater -To present results using a bar chart -To suggest which variables to measure and for how long -To design simple results tables -To identify when results or observations do not match predictions	**Classification and Changing Habitats** **Working Scientifically** -To record data in different ways -To apply and create classification keys -To make and use classification keys -To gather, record, classify and present data -To research using an information sheet	**Making Connections: How does the Flow of Liquids Compare?** **Working Scientifically** -To plan a comparative test -To gather and record data -To conclude and evaluate the investigation -To use further data to inform a conclusion -To report on findings in the form of an advert

			-To research climate change and the water cycle			
Year 5	**Materials: Mixture and Separation** **Working Scientifically** – To research using a range of secondary resources -To draw and annotate a diagram to explain a concept -To identify testable questions and how to answer them -To make observations about solutions -To plan a fair test with consideration of variables and measurements	**Properties and Changes** **Working Scientifically** - To evaluate the hardness test to determine the degree of trust in the results - To plan and draw a table of results - To write a detailed, organised method that is easy to follow - To write a prediction using prior knowledge of the states of matter - To analyse observations about rusting and use them to support a conclusion - To measure the circumference of a balloon accurately	**Earth and Space** **Working Scientifically** - To pose testable questions about the Solar System - To develop a model to represent the Solar System - To design and draw a table - To draw a diagram to explain day and night - To calibrate and use a sundial to measure time -To use temperature data to make predictions about climate change	**Life Cycle and Reproduction** **Working Scientifically** -To observe and compare equivalent parts in different flowers -To research the life cycles of different mammals -To pose questions to compare the life cycles of different birds -To suggest how temperature may affect egg hatching -To use data to describe a relationship and make predictions -To represent root growth over time on a line graph	**Unbalanced Forces** **Working Scientifically** -To analyse data to write a conclusion -To plan a fair test to investigate air resistance -To design a results table -To evaluate a method -To draw and label a diagram -To draw an accurate line graph	**Human Timeline** **Working Scientifically** -To plan a comparative test -To gather and record data -To conclude and evaluate the investigation **Making connections: Does the Size of an Asteroid Affect its Impact Strength?** **Working Scientifically** -To plan a comparative test -To gather and record data -To conclude and evaluate the investigation
Year 6	**Living Things: Classifying Big and Small** **Working Scientifically** – To use a classification key to classify frog species	**Light and Reflection** **Working Scientifically** -To draw scientific diagrams -To pose questions -To record results as a line graph	**Evolution and Inheritance** **Working Scientifically** -To group factors -To evaluate the degree of trust and	**Circuits, Batteries and Switches** **Working Scientifically** -To use standardised symbols when drawing diagrams	**Circulation and Health** **Working Scientifically** -To evaluate sources of information -To evaluate a model	**Making Connections: Are some Sunglasses Safer than Others?** **Working Scientifically** -To plan a comparative test

	-To use a classification key to classify vertebrates -To use a classification key to classify invertebrates -To produce a working classification key. -To use a classification key to classify bacteria	-To explore different jobs or inventions that depend on reflection	pose new questions for further enquiry -To consider evidence used to inform theories -To consider the degree of trust in the evidence used	-To explain results using scientific knowledge -To design a results table -To plan an enquiry -To recognise that scientific knowledge can solve a problem	-To interpret patterns in data -To write a method -To draw a line graph	-To gather and record data - To conclude and evaluate the investigation -To use further data to inform a conclusion -To report on findings in the form of an advert