

Overview of Skills progression for Science (Year A)

	EYFS	Y1	Y2	Y3	Y4	Y5	Y6
Plan	<ul style="list-style-type: none"> Choose the resources they need for their chosen activities and say when they do and don't need help. 	<ul style="list-style-type: none"> Ask simple question and recognize that they can be answered in different ways 		<ul style="list-style-type: none"> Ask relevant questions and use different types of scientific enquiry to answer them. Set up simple practical enquiries and comparative fair tests. 		<ul style="list-style-type: none"> Plan different types of scientific enquiry to answer questions, including recognizing and controlling variables where necessary. 	
Do	<ul style="list-style-type: none"> Know about similarities and difference in relation to places, objects, materials and living things. Make observations of animals and plants. Explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Select and use technology for particular purposes. 	<ul style="list-style-type: none"> Observe closely using simple equipment. Perform simple tests. Identify and classify. 		<ul style="list-style-type: none"> Make systematic and careful observations and, where appropriate, take accurate measurements using standard units. Use a range of equipment, including thermometers and data loggers. 		<ul style="list-style-type: none"> Take measurements using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate. 	
Record	<ul style="list-style-type: none"> Represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories. 	<ul style="list-style-type: none"> Gather and record data to help in answering questions. 		<ul style="list-style-type: none"> 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. 		<ul style="list-style-type: none"> Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs. 	
Review	<ul style="list-style-type: none"> Talk about the features of their own immediate environment and how environments might vary from one to another. Explain why some things occur and talk about changes. 	<ul style="list-style-type: none"> Use their observations and ideas to suggest answers to questions 		<ul style="list-style-type: none"> Report on findings from enquiries, including oral and written explanations, display or presentations of results and conclusions. Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. Identify difference, similarities or changes related to simple scientific processes. Use straightforward scientific evidence to answer questions or to support their findings. 		<ul style="list-style-type: none"> Use test results to make predictions to set up further comparative and fair test Report and present findings from enquiries, including conclusions, casual relationships and explanations of and degree of trust in results, in oral and written forms. Identify scientific evidence that has been used to support or refute ideas and arguments. 	

Skills progression for Science

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
YR	<ul style="list-style-type: none"> • Sorting • Grouping • Comparing • Observations • Predictions 		<ul style="list-style-type: none"> • Sorting • Grouping • Comparing • Observations • Predictions 		<ul style="list-style-type: none"> • Sorting • Grouping • Comparing • Observations • Predictions 	
Y1	<p>Everyday Materials</p> <ul style="list-style-type: none"> • Observing closely, using simple equipment • Identifying and classifying • Asking simple questions and recognising that they can be answered in different ways • Using their observations and ideas to suggest answers to questions • Gathering and recording data to help in answering questions. • Performing simple tests <p>Seasons</p> <ul style="list-style-type: none"> • Observing closely, using simple equipment • Using their observations and ideas to suggest answers to questions • Gathering and recording data to help in answering questions. • Asking simple questions and recognising that they can be answered in different ways 		<p>Animals</p> <ul style="list-style-type: none"> • Observing closely, using simple equipment • Performing simple tests • Identifying and classifying • Gathering and recording data to help in answering questions. <p>Seasons</p> <ul style="list-style-type: none"> • Observing closely, using simple equipment • Using their observations and ideas to suggest answers to questions • Gathering and recording data to help in answering questions. • Asking simple questions and recognising that they can be answered in different ways 		<p>Plants</p> <ul style="list-style-type: none"> • Observing closely, using simple equipment • Identifying and classifying • Gathering and recording data to help in answering questions. <p>Seasons</p> <ul style="list-style-type: none"> • Observing closely, using simple equipment • Using their observations and ideas to suggest answers to questions • Gathering and recording data to help in answering questions. • Asking simple questions and recognising that they can be answered in different ways 	
Y2	<p>Uses of everyday materials</p> <ul style="list-style-type: none"> • Identifying and classifying • Asking simple questions and recognising that they can be answered in different ways • Observing closely, using simple equipment • Performing simple tests • Using their observations and ideas to suggest answers to questions • Gathering and recording data to help in answering questions. 		<p>Animals</p> <ul style="list-style-type: none"> • Identifying and classifying • Using their observations and ideas to suggest answers to questions • Gathering and recording data to help in answering questions. • Observing closely, using simple equipment • Asking simple questions and recognising that they can be answered in different ways 		<p>Plants</p> <ul style="list-style-type: none"> • Observing closely, using simple equipment • Asking simple questions and recognising that they can be answered in different ways • Performing simple tests • Using their observations and ideas to suggest answers to questions 	<p>Humans</p> <ul style="list-style-type: none"> • Identifying and classifying • Performing simple tests • Gathering and recording data to help in answering questions.

Skills progression for Science

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	
Y3	<p>Forces and magnets</p> <ul style="list-style-type: none"> 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 Setting up simple practical enquiries, comparative and fair tests Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions Using straightforward scientific evidence to answer questions or to support their findings. Identifying differences, similarities or changes related to simple scientific ideas and processes Asking relevant questions and using different types of scientific enquiries to answer them 	<p>Light</p> <ul style="list-style-type: none"> Setting up simple practical enquiries, comparative and fair tests Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions 	<p>Animals</p> <ul style="list-style-type: none"> Gathering, recording, classifying and presenting data in a variety of ways 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 Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions Using straightforward scientific evidence to answer questions or to support their findings. 	<p>Rocks</p> <ul style="list-style-type: none"> Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers Setting up simple practical enquiries, comparative and fair tests 	<p>Plants</p> <ul style="list-style-type: none"> 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 Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions Identifying differences, similarities or changes related to simple scientific ideas and processes Setting up simple practical enquiries, comparative and fair tests Using straightforward scientific evidence to answer questions or to support their findings. Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions Asking relevant questions and using different types of scientific enquiries to answer them 		

Skills progression for Science

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Y4	<p>Sound</p> <ul style="list-style-type: none"> Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions Setting up simple practical enquiries, comparative and fair tests Identifying differences, similarities or changes related to simple scientific ideas and processes 	<p>Electricity</p> <ul style="list-style-type: none"> Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions Using straightforward scientific evidence to answer questions or to support their findings. Asking relevant questions and using different types of scientific enquiries to answer them Identifying differences, similarities or changes related to simple scientific ideas and processes 	<p>Animals</p> <ul style="list-style-type: none"> Asking relevant questions and using different types of scientific enquiries to answer them Setting up simple practical enquiries, comparative and fair tests 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 Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables 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 Using straightforward scientific evidence to answer questions or to support their findings. 	<p>Living things and their habitats</p> <ul style="list-style-type: none"> Asking relevant questions and using different types of scientific enquiries to answer them Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions Setting up simple practical enquiries, comparative and fair tests Using straightforward scientific evidence to answer questions or to support their findings. 	<p>States of matter</p> <ul style="list-style-type: none"> Identifying differences, similarities or changes related to simple scientific ideas and processes 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 Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions 	

Skills progression for Science

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	
Y5	<p>Skills based open-ended investigation: Natural Dyes</p> <ul style="list-style-type: none"> Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate Using test results to make predictions to set up further comparative and fair tests Identifying scientific evidence that has been used to support or refute ideas or arguments. 	<p>Space</p> <ul style="list-style-type: none"> Identifying scientific evidence that has been used to support or refute ideas or arguments. Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary 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 	<p>Life cycles and reproduction</p> <ul style="list-style-type: none"> 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 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 degree of trust in results, in oral and written forms such as displays and other presentations Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs Identifying scientific evidence that has been used to support or refute ideas or arguments 	<p>Forces</p> <ul style="list-style-type: none"> Identifying scientific evidence that has been used to support or refute ideas or arguments. Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary Using test results to make predictions to set up further comparative and fair tests Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs 	<p>Properties and changes in materials</p> <ul style="list-style-type: none"> Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate Using test results to make predictions to set up further comparative and fair tests Identifying scientific evidence that has been used to support or refute ideas or arguments. 		

Skills progression for Science

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Y6	<p>Skills based open-ended investigation: Natural Dyes</p> <ul style="list-style-type: none"> Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate Using test results to make predictions to set up further comparative and fair tests Identifying scientific evidence that has been used to support or refute ideas or arguments. 	<p>Light</p> <ul style="list-style-type: none"> Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs 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 	<p>Classification</p> <ul style="list-style-type: none"> Identifying scientific evidence that has been used to support or refute ideas or arguments. 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 Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary Using test results to make predictions to set up further comparative and fair tests 	<p>Evolution and Inheritance</p> <ul style="list-style-type: none"> Identifying scientific evidence that has been used to support or refute ideas or arguments. Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations 	<p>Bodily systems</p> <ul style="list-style-type: none"> 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 Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations 	<p>Electricity</p> <ul style="list-style-type: none"> Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs Identifying scientific evidence that has been used to support or refute ideas or arguments. Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary 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 degree of trust in results, in oral and written forms such as displays and other presentations Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate