Cantrell Primary School - Working Scientifically Progression

	Autumn	Spring	Summer
Year 1	**What lives on our planet?** *NC reference: Animals, including humans (Autumn Term)* **What are objects made out of and why do we use them?** *NC reference: Everyday materials* **Sensing Seasons** *NC reference: Seasonal changes (autumn/winter)*	**Plant Detectives** *NC reference: Plants* **Sensing Seasons** *NC reference: Seasonal changes (spring)*	**Animals Antics!** *NC reference: Animals, including humans* **Sensing Seasons** *NC reference: Seasonal changes (summer)*
Year 2	**Where do animals live and why?** *NC reference: Living things in their habitats* **Which material shall I use?** *NC reference: Everyday materials*	**Which material shall I use?** *NC reference: Everyday Materials* **How do we take care of ourselves?** *NC reference: Animals, including humans*	**Growing Up!** *NC reference: Animals, including humans* **The Apprentice Gardener** *NC reference: Plants*
Year 3	**Rock Detectives** *NC reference: Rocks*	**Can You See Me?** *NC reference: Light* **The Power of Forces!** *NC reference: Forces and magnets*	**How does Your Garden Grow?** *NC reference: Plants* **Our Amazing Bodies!** *NC reference: Animals, including humans*
Year 4	**Recognising the dangers, sources, risks and safety aspects of electricity** *NC reference: Electricity* **Do I understand some of the properties of solids, liquids and gases?** *NC reference: States of matter*	**Do I understand some of the properties of solids, liquids and gases?** *NC reference: States of matter* **How do we hear?** *NC reference: Sound*	**Local living things - what are they?** *NC reference: Living things and their habitats* **Finding the answers to questions about digestion, teeth and food chains** *NC reference: Animals, including humans*
Year 5	**How do forces change the way objects move?** *NC reference: Forces* **How are materials used in the everyday world?** *NC reference: Properties of materials*	**Out of this World!** *NC reference: Earth and Space*	**The Circle of Life!** *NC reference: Living things and their habitats* **How do humans change as they get older?** *NC reference: Animals, including humans*
Year 6	**Can you sort this mess? How are living things grouped together?** *NC reference: Living things and their habitats* **Everything Changes!** *NC reference: Evolution and inheritance*	**Danger! Danger! Low Voltage!** *NC reference: Electricity* **Light Up Your World!** *NC reference: Light*	**Body Pump!** *NC reference: Animals, including humans*

Cantrell Primary School - Working Scientifically Progression

Year 1: Working Scientifically

During years 1 and 2, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

1.1 asking simple questions and recognising that they can be answered in different ways

1.2 observing closely, using simple equipment

1.3 performing simple tests

1.4 identifying and classifying

1.5 using their observations and ideas to suggest answers to questions

1.6 gathering and recording data to help in answering questions.

Cantrell Primary School - Working Scientifically Progression

Year 2: Working Scientifically

During years 1 and 2, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

2.1 asking simple questions and recognising that they can be answered in different ways

2.2 observing closely, using simple equipment

2.3 performing simple tests

2.4 identifying and classifying

2.5 using their observations and ideas to suggest answers to questions

2.6 gathering and recording data to help in answering questions.

Cantrell Primary School - Working Scientifically Progression

Year 3: Working Scientifically

During years 3 and 4, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

3.1 asking relevant questions and using different types of scientific enquiries to answer them

3.2 setting up simple practical enquiries, comparative and fair tests

3.3 making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers

3.4 gathering, recording, classifying and presenting data in a variety of ways to help in answering questions

3.5 recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables

3.6 reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions

3.7 using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions

3.8 identifying differences, similarities or changes related to simple scientific ideas and processes

3.9 using straightforward scientific evidence to answer questions or to support their findings.

Cantrell Primary School - Working Scientifically Progression

Year 4: Working Scientifically

During years 3 and 4, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

4.1 asking relevant questions and using different types of scientific enquiries to answer them

4.2 setting up simple practical enquiries, comparative and fair tests

4.3 making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers

4.4 gathering, recording, classifying and presenting data in a variety of ways to help in answering questions

4.5 recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables

4.6 reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions

4.7 using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions

4.8 identifying differences, similarities or changes related to simple scientific ideas and processes

4.9 using straightforward scientific evidence to answer questions or to support their findings.

Cantrell Primary School - Working Scientifically Progression

Year 5: Working Scientifically

During years 5 and 6, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

5.1 planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary

5.2 taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate

5.3 recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs

5.4 using test results to make predictions to set up further comparative and fair tests

5.5 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

5.6 identifying scientific evidence that has been used to support or refute ideas or arguments.

Cantrell Primary School - Working Scientifically Progression

Year 6: Working Scientifically

During years 5 and 6, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

6.1 planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary

6.2 taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate

6.3 recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs

6.4 using test results to make predictions to set up further comparative and fair tests

6.5 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

6.6 identifying scientific evidence that has been used to support or refute ideas or arguments.