

Cassop Primary School & Nursery



Science Medium Term Plan : Year 3 topic - Class 3

I know that I need light in order to see things.	Cycle A Autumn 2	I know that light from the sun can be dangerous and that there are ways to protect eyes.
I know that dark is the absence of light.	Light	I can recognise that shadows are formed when the light from a light source is blocked by a solid object.
I know that light is reflected off surfaces.	Key Question Is a shadow always the same size?	I can find patterns in the way that the size of a shadow changes.

Year 3/4 NC Working Scientifically:

I can ask relevant questions and use different types of scientific enquiries to answer them

I can set up simple practical enquiries, comparative and fair tests

I can make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers

I can record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables

I can gather, record, classify and present data in a variety of ways to help in answering questions

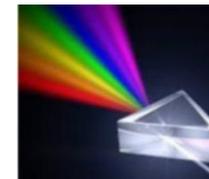
I can identify differences, similarities or changes related to simple scientific ideas and processes

I can report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions

I can use straightforward scientific evidence to answer questions or to support their findings

I can use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions

Science Medium Term Plan : Year 6 topic - Class 5



<p>Cycle B Spring 1</p>	<p>Light Key Question How does light travel?</p>	<p>I can explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes.</p>
<p>I can recognise that light appears to travel in straight lines.</p>	<p>I can use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye.</p>	<p>I can use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.</p>
<p>Year 5/6 NC Working Scientifically: I can plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary I can take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings where appropriate I can record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs I can identify scientific evidence that has been used to support or refute ideas or arguments I can report and present findings from enquiries, including conclusions, casual relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations I can use test results to make predictions to set up further comparative and fair tests</p>		

Science Medium Term Plan Year 4 topic - Class 3



<p style="text-align: center;">Cycle A Class 3 Autumn 1</p>	<p style="text-align: center;">Living Things & Their Habitats</p>	<p style="text-align: center;">Key Question Can you use a classification key?</p>
<p>I can recognise that living things can be grouped in a variety of ways.</p>	<p>I can explore and use classification keys to help group, identify and name a variety of living things in the local area and wider community.</p>	<p>I can recognise that environments can change and that this can sometimes pose dangers to living things.</p>
<p>Year 3/4 NC Working Scientifically:</p> <ul style="list-style-type: none"> I can ask relevant questions and use different types of scientific enquiries to answer them I can set up simple practical enquiries, comparative and fair tests I can make systematic and careful observations and, where appropriate, take accurate measurements using standards units, using a range of equipment, including thermometers and data loggers I can record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables I can gather, record, classify and present data in a variety of ways to help in answering questions I can identify differences, similarities or changes related to simple scientific ideas and processes I can report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions I can use straightforward scientific evidence to answer questions or to support their findings I can use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions 		

Science Medium Term Plan Year 2 topic - Class 2



I can explore and compare the difference between things that are living, dead and things that have never been alive.	Cycle B Summer Term	I can identify and name a variety of plants and animals in their habitats, including microhabitats.
I can identify that most living things live in habitats to which they are suited.	Living Things & Their Habitats	I can describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.
I can describe how different habitats provide the basic needs of different kinds of animals and plants, and how they depend on each other.	Key Question Are all habitats the same?	
<p>Year 1/2 NC Working Scientifically:</p> <p>I can ask simple questions and recognise that they can be answered in different ways</p> <p>I can observe closely, using simple equipment</p> <p>I can perform simple tests</p> <p>I can gather and record data to help in answering questions</p> <p>I can identify and classify</p> <p>I can use observations and ideas to suggest answers to questions</p>		

Science Medium Term Plan Year 5/6 topic - Class 5



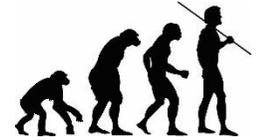
<p style="text-align: center;">Cycle A & B Autumn 2 A – Classification B – Lifecycles/Reproduction</p>	<p style="text-align: center;">Living Things & Their Habitats Key Question How are they classified?</p>
<p>I can describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.</p>	<p>I can describe the life process of reproduction in some plants and animals.</p>
<p>I can describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals.</p>	<p>I can give reasons for classifying plants and animals based on specific characteristics.</p>
<p>Year 5/6 NC Working Scientifically: I can plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary I can take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings where appropriate I can record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs I can identify scientific evidence that has been used to support or refute ideas or arguments I can report and present findings from enquiries, including conclusions, casual relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations I can use test results to make predictions to set up further comparative and fair tests</p>	

Science Medium Term Plan Year 4/5 topic - Class 4



<p>Cycle A Autumn Term</p>	<p>Living Things & Their Habitats</p>	<p>Key Question How does a species grow and develop?</p>
<p>I can recognise that living things can be grouped in a variety of ways.</p>	<p>I can explore and use classification keys to help group, identify and name a variety of living things in the local area and wider community.</p>	<p>I can recognise that environments can change and that this can sometimes pose dangers to living things.</p>
<p>I can describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.</p>	<p>I can describe the life process of reproduction in some plants and animals</p>	
<p>Year 3/4 NC Working Scientifically:</p> <p>I can ask relevant questions and use different types of scientific enquiries to answer them</p> <p>I can set up simple practical enquiries, comparative and fair tests</p> <p>I can make systematic and careful observations and, where appropriate, take accurate measurements using standards units, using a range of equipment, including thermometers and data loggers</p> <p>I can record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables</p> <p>I can gather, record, classify and present data in a variety of ways to help in answering questions</p> <p>I can identify differences, similarities or changes related to simple scientific ideas and processes</p> <p>I can report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</p> <p>I can use straightforward scientific evidence to answer questions or to support their findings</p> <p>I can use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</p>		
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Science Medium Term Plan Year 6 topic - Class 5



<p style="text-align: center;">Cycle A Autumn 1</p>	<p style="text-align: center;">Inheritance, Evolution, Adaptation</p>	<p style="text-align: center;">Key Question How have we evolved?</p>
<p style="text-align: center;">I can recognise that living things have changed over time.</p>	<p style="text-align: center;">I know that fossils provide information about living things that inhabited the Earth millions of years ago.</p>	<p style="text-align: center;">I can identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. e.g. camel, cacti, penguins</p>
<p style="text-align: center;">I know how fossils are formed.</p>	<p style="text-align: center;">I can recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.</p>	<p style="text-align: center;">I know about the work of palaeontologists. e.g. Mary Anning and Charles Darwin</p>
<p>Year 5/6 NC Working Scientifically:</p> <p>I can plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</p> <p>I can take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings where appropriate</p> <p>I can record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</p> <p>I can identify scientific evidence that has been used to support or refute ideas or arguments</p> <p>I can report and present findings from enquiries, including conclusions, casual relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations</p> <p>I can use test results to make predictions to set up further comparative and fair tests</p>		

Science Medium Term Plan KS1- Class 2



I can identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.	Cycle A & B Spring Term A – Identification B – Basic needs/Human Body	I can find out about and describe the basic needs of animals, including humans, for survival (water, food, air).
I can identify and name a variety of common animals that are carnivores, herbivores and omnivores.	Animals, Including Humans	I can describe the importance for humans to exercise, eat the right amounts of different types of foods, and have good hygiene.
I can describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).	Key Question How do we survive and grow?	I can identify, name, draw and label the basic parts of the human body.
I can talk about animals, including humans, having offspring which grow into adults.		I know which part of the body is associated with each sense.
Year 1/2 NC Working Scientifically: I can ask simple questions and recognise that they can be answered in different ways I can observe closely, using simple equipment I can perform simple tests I can gather and record data to help in answering questions I can identify and classify I can use observations and ideas to suggest answers to questions		



Science Medium Term Plan Year 4/5 topic - Class 4

<p>I can describe the simple functions of the basic parts of the digestive system in humans.</p>	<p>Cycle B Autumn Term Classification</p>	<p>I can construct and interpret a variety of food chains, identifying producers, predators and prey.</p>
<p>I can identify the different types of teeth in humans and their simple functions.</p>	<p>Animals, Including Humans Key Questions What are the processes of eating and how do they work? How do we change as we grow?</p>	<p>I can describe the changes as humans develop to old age.</p>
<p>Year 3/4 NC Working Scientifically: I can ask relevant questions and use different types of scientific enquiries to answer them I can set up simple practical enquiries, comparative and fair tests I can make systematic and careful observations and, where appropriate, take accurate measurements using standards units, using a range of equipment, including thermometers and data loggers I can record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables I can gather, record, classify and present data in a variety of ways to help in answering questions I can identify differences, similarities or changes related to simple scientific ideas and processes I can report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions I can use straightforward scientific evidence to answer questions or to support their findings I can use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</p>		
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Science Medium Term Plan Year3/4 topic - Class 3



I can identify animals, including humans, need the right type of nutrition.	Cycle B Autumn Term	I can identify the different types of teeth in humans.
I know that animals, including humans, cannot make their own food; they get nutrition from what they eat.		I know the simple functions of the different types of teeth in humans.
I can identify humans and some other animals have skeletons and muscles for support, protection and movement.	Animals, Including Humans	I can construct and interpret a variety of food chains, identifying producers, predators and prey.
I can describe the simple functions of the basic parts of the digestive system in humans.		
<p>Year 3/4 NC Working Scientifically:</p> <p>I can ask relevant questions and use different types of scientific enquiries to answer them</p> <p>I can set up simple practical enquiries, comparative and fair tests</p> <p>I can make systematic and careful observations and, where appropriate, take accurate measurements using standards units, using a range of equipment, including thermometers and data loggers</p> <p>I can record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables</p> <p>I can gather, record, classify and present data in a variety of ways to help in answering questions</p> <p>I can identify differences, similarities or changes related to simple scientific ideas and processes</p> <p>I can report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</p> <p>I can use straightforward scientific evidence to answer questions or to support their findings</p> <p>I can use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</p>		

Science Medium Term Plan Year 5/6 topic - Class 5



I can describe the changes as humans develop to old age.	<p>Cycle B Autumn 1</p>	I can recognise the impact of diet, exercise, drugs and lifestyle on the way body's function.
I can identify and name the main parts of the circulatory system.	<p>Animals, Including Humans</p> <p>Key Questions What are the processes of eating and how do they work? How do our bodies function well?</p>	I can describe the ways in which nutrients and water are transported within animals, including humans.
I can describe the functions of the heart, blood vessels and blood.		
<p>Year 5/6 NC Working Scientifically:</p> <p>I can plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</p> <p>I can take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings where appropriate</p> <p>I can record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</p> <p>I can identify scientific evidence that has been used to support or refute ideas or arguments</p> <p>I can report and present findings from enquiries, including conclusions, casual relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations</p> <p>I can use test results to make predictions to set up further comparative and fair tests</p>		

Science Medium Term Plan KS1 - Class 2



I can find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.	Cycle A Summer 1	I can identify and describe the basic structure of a variety of common flowering plants, including trees.
I can identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.	Plants Key Questions Can you name the plant? How do plants grow well?	I can observe and describe how seeds and bulbs grow into mature plants.
Year 1/2 NC Working Scientifically: I can ask simple questions and recognise that they can be answered in different ways I can observe closely, using simple equipment I can perform simple tests I can gather and record data to help in answering questions I can identify and classify I can use observations and ideas to suggest answers to questions		

Science Medium Term Plan Year 3 topic - Class 3



<p style="text-align: center;">Cycle A Spring 1</p>	<p style="text-align: center;">Rocks</p>	<p style="text-align: center;">Key Question What is a fossil?</p>
<p>I can compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.</p>	<p>I can describe in simple terms how fossils are formed when things that have lived are trapped within a rock.</p>	<p>I can recognise that soils are made from rocks and organic matter.</p>
<p>Year 3/4 NC Working Scientifically:</p> <ul style="list-style-type: none"> I can ask relevant questions and use different types of scientific enquiries to answer them I can set up simple practical enquiries, comparative and fair tests I can make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers I can record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables I can gather, record, classify and present data in a variety of ways to help in answering questions I can identify differences, similarities or changes related to simple scientific ideas and processes I can report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions I can use straightforward scientific evidence to answer questions or to support their findings I can use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions 		

Science Medium Term Plan Year 4 topic - Class 3 and 4



I can identify how sounds are made, associating some of them with something vibrating.	Class 4 – Cycle A Spring Term Class 3 - Cycle A Spring 2	I can find patterns between the volume of a sound and the strength of the vibrations that produced it.
I can recognise that vibrations from sounds travel through a medium to the ear.	Sound	I can recognise that sounds get fainter as the distance from the sound source increases.
I can find patterns between the pitch of a sound and features of the object that produced it.	Key Question How can we change the pitch and volume of a sound that we make?	
<p>Year 3/4 NC Working Scientifically:</p> <p>I can ask relevant questions and use different types of scientific enquiries to answer them</p> <p>I can set up simple practical enquiries, comparative and fair tests</p> <p>I can make systematic and careful observations and, where appropriate, take accurate measurements using standards units, using a range of equipment, including thermometers and data loggers</p> <p>I can record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables</p> <p>I can gather, record, classify and present data in a variety of ways to help in answering questions</p> <p>I can identify differences, similarities or changes related to simple scientific ideas and processes</p> <p>I can report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</p> <p>I can use straightforward scientific evidence to answer questions or to support their findings</p> <p>I can use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</p>		

Science Medium Term Plan Year 5 topic - Class 4 and 5



I can describe the movement of the Earth, and other planets, relative to the Sun.	<p>Class 4 & 5 Cycle A Spring Term</p>	I can describe the Sun, Earth and Moon as approximately spherical bodies.
I can describe the movement of the Moon, relative to the Earth.	<p>Earth & Space Key Question How does the Earth move?</p>	I can use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.
<p>Year 5/6 NC Working Scientifically:</p> <p>I can plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</p> <p>I can take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings where appropriate</p> <p>I can record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</p> <p>I can identify scientific evidence that has been used to support or refute ideas or arguments</p> <p>I can report and present findings from enquiries, including conclusions, casual relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations</p> <p>I can use test results to make predictions to set up further comparative and fair tests</p>		