



Science

Oakhill Church School

Our curriculum is designed and built upon children’s prior knowledge, and we use quality first-hand experiences to help unlock children's curiosity and invest in their cultural understanding and capital. The curriculum makes links and connections to establish purposeful learning which is relevant now and for life in the future.

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Curriculum Overview

EYFS – Understanding the World

Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
<p>We are learning to: explore the different light sources and how they work; investigate the seasons and talk about seasonal change; investigate the climate in our country</p> <p>Y1 Link: Cycle A: How do trees and plants change across the four seasons?</p>	<p>We are learning to: explore how magnets work; explore how I can test my ideas to affect change of matter</p> <p>Y1 Link: Cycle A: Y1 Materials: How can the shapes of everyday solids be changed?</p>	<p>We are learning to: explain what happens when light travels through transparent materials; explain why some materials are attracted to magnets and some are not; explain how my ideas made the process of changing states of matter faster or slower</p> <p>Y1 Link: Cycle A: Y1 Materials: How can the shapes of everyday solids be changed?</p>	<p>We are learning to: understand and talk about seasons how this affects plant life; investigate the climate in the world around me</p> <p>Y1 Link: Cycle A: Animals: What are the names of some common animals and how do they grow?</p>	<p>We are learning to: explain what happens when light travels through opaque materials; use the words repel and attract; predict what my happen to changes of matter, test my ideas and reach a conclusion</p>	<p>We are learning to: identify how animals behave during different seasons; investigate the effect I can have on the climate, animals and plants</p> <p>Y1 Link: Cycle A: Y1 Plants : What are the different parts of a plant and how do they survive?</p>

Year 1/2

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Cycle A	<p>Seasons (Y1)</p> <p>How do trees and plants change across the four seasons?</p>	<p>Animals including Humans (Y1/2)</p> <p>What are the names of some common animals and how do they grow?</p>	<p>Materials (Y1/2)</p> <p>How can the shapes of everyday solids be changed?</p>		<p>Living Things (Y2)</p> <p>What is a food chain?</p>	<p>Plants (Y1/2)</p> <p>What are the different parts of a plant and how do they survive?</p>
Cycle B	<p>Seasons (Y1)</p> <p>How does weather and daylight changes across the four seasons?</p>	<p>Animals including Humans (Y1/2)</p> <p>What do different animals need to survive?</p>	<p>Everyday Materials (Y1/2)</p> <p>How are materials suited to their uses?</p>		<p>Living Things (Y2)</p> <p>What is a habitat?</p>	<p>Plants (Y1/2)</p> <p>What are common wild and garden plants and how do they grow?</p>

Year 3/4

Term 1	Term 2	Term 3	Term 4	Term 5	Term 6



Curriculum Overview

Cycle A	Rocks (Y3) What are the different types of rocks?	Light (Y3) What are different sources of light?	Animals including Humans (Y3/4) Teeth, Food Chains and Nutrition	Electricity (Y4) What impact does electricity have on daily life?	Living Things (Y4) How can we group living things?	Plants (Y3) What are the parts of a flowering plant?
Cycle B	Rocks (Y3) How are fossils formed?	Light (Y3) How are shadows formed?	Animals including Humans (Y3/4) Skeletons and Digestion	Electricity (Y4) What are conductors and insulators?	Living Things (Y4) How can habitat changes affect species?	Plants (Y3) How do plants transport water and reproduce?

Year 4/5

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Cycle A	States of Matter (Y4) What is a solid, liquid and a gas?	Sound (Y4) How do different objects produce sounds of different volumes and pitches?	Forces and Magnets (Y3/5) What are the effects of different forces on objects?	Earth and Space (Y5) What is our place in the universe?		Living Things in their Habitats (Y5) What are life cycles differences in mammals, amphibians, insects and birds?
Cycle B	States of Matter (Y4) What is the water cycle?	Sound (Y4) How are sounds made?	Forces and Magnets (Y3/5) How do magnets and mechanisms impact objects?	Earth and Space (Y5) Why do we have day and night and seasons?		Living Things in their Habitats (Y5) How do plants reproduce?

Year 5/6

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
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Curriculum Overview

Cycle A	<p>Properties and Changes of Materials (Y5)</p> <p>How can we group everyday materials?</p>	<p>Electricity (Y6)</p> <p>How does voltage affect a circuit?</p>	<p>Light (Y6)</p> <p>How does reflection help us see objects?</p>	<p>Evolution and Inheritance (Y6)</p> <p>What evidence is there for evolution?</p>	<p>Living Things in their Habitats (Y6)</p> <p>How has Carl Linnaeus influenced classification?</p>	<p>Animals including Humans (Y6) – LINK WITH JIGSAW (Changing Me)</p> <p>How do humans change from a foetus to late adulthood?</p> <p>Animals including Humans (Y6)</p> <p>How can our health be impacted?</p>
Cycle B	<p>Properties and Changes of Materials (Y5)</p> <p>How can materials be formed and mixtures be separated?</p>	<p>Electricity (Y6)</p> <p>What can affect the way that components function?</p>	<p>Light (Y6)</p> <p>What effects can light travelling in straight lines have?</p>	<p>Evolution and Inheritance (Y6)</p> <p>How have animals adapted to suit their environments?</p>	<p>Living Things in their Habitats (Y6)</p> <p>What are microorganisms?</p>	<p>Animals including Humans (Y6) – LINK WITH JIGSAW (Changing Me)</p> <p>Does gestation period influence life expectancy?</p> <p>Animals including Humans (Y5)</p> <p>How are blood, nutrients and water transported in our bodies?</p>



Developing Scientific Skills

Being an Oakhill Scientist:



Developing Scientific Skills

	<p style="text-align: center;">Observe!</p> <ul style="list-style-type: none"> • Y1/2: Use simple equipment to observe closely; make careful observations (<i>including observing changes over time</i>) • Y3/4: Make <i>systematic</i> observations and comparisons (<i>simple practical enquiries, comparative and fair tests</i>). • Y5/6 : <i>Using a variety of contexts</i>, make <i>systematic, relevant</i> observations and comparisons. 		<p style="text-align: center;">Fair Test!</p> <ul style="list-style-type: none"> • Y1/2: Identify different <i>types of enquiry</i> that answer scientific questions: research, pattern seeking, observation. • Y3/4: <i>With guidance</i>, identify <i>some</i> key variables (control and independent) that must stay the same for it to be a fair test • Y5: <i>With support</i>, identify <i>most</i> key variables (control, independent and <i>dependent</i>) to ensure a fair test. • Y6: <i>Understand, select and plan</i> the most appropriate practical enquiry; identify and control most key variables where necessary.
	<p style="text-align: center;">Patterns!</p> <ul style="list-style-type: none"> • Y1/2: Use observations, <i>and recorded data</i>, to suggest answers to questions (<i>noticing similarities and differences and patterns</i>). • Y3/4: Identify <i>differences, similarities, or changes</i> in results related to own scientific ideas, and other straightforward <i>scientific evidence</i>. • Y5/6: Identify trends and patterns in results - identifying scientific evidence that has been used to support or <i>refute such conclusions</i>. 		<p style="text-align: center;">Research!</p> <ul style="list-style-type: none"> • Y1: Identify that questions can be answers in <i>different ways</i>; make <i>simple</i> predictions. • Y3/4: Make predictions based on everyday experience and <i>existing scientific ideas</i> (using scientific vocabulary) • Y5/6: Make detailed predictions based on existing scientific knowledge to their own, or others', questions.
	<p style="text-align: center;">Identify and Group!</p> <ul style="list-style-type: none"> • Y1/2: <i>Link</i> simple predictions to outcomes. • Y3/4: Use <i>data/results</i> to draw <i>simple- detailed</i> conclusions to predictions. • Y5/6: Use data/results to draw detailed conclusions to predictions – <i>sometimes making further predictions from results</i>. 		<p style="text-align: center;">Language!</p> <ul style="list-style-type: none"> • Y1/2: Record and communicate their findings in a range of ways and begin to use simple scientific language. • Y3/4: Use some scientific language, first, to talk about and, later, to write about what they have found out. • Y5/6: Use their scientific knowledge and understanding to explain their findings
	<p style="text-align: center;">Questioning!</p> <ul style="list-style-type: none"> • Y1/2: Ask simple questions and recognise that they can be answered in different ways (<i>including use of scientific language</i>); record findings in tables, drawings and block graphs. • Y3/4: Suggest relevant questions that can be the basis of the <i>different types of scientific enquiry</i>: research, pattern seeking, observation, fair testing, classifying; record results using scientific language, tables, <i>labelled diagrams</i>, bar charts, and keys. • Y5/6: <i>Independently</i> suggest questions that can be the basis of the different types of scientific enquiry; record results using scientific language, tables, <i>scientifically labelled diagrams</i>, bar charts, <i>line graphs</i>, <i>classification keys</i> 		

Developing Scientific Skills

	<p style="text-align: center;">Observe!</p> <p>Y1/2: OGDEN (<i>Keeping Warm in Space</i>); Crest (<i>Sniffly Sneezes</i>); TAPS (<i>Animals – Growth</i>) Y3/4: TAPS (<i>Plant Stems</i>); TAPS (<i>Measuring Plants</i>); TAPS (<i>Making Shadows</i>); TAPS (<i>Animal Teeth</i>) Y4/5: OGDEN (<i>Rockets</i>); CREST: <i>Under Your Feet</i>; Concept Cartoon 1.5 Y5/6: Crest (<i>Fingerprints</i>); Crest (<i>Get Set Jellies</i>); Concept Cartoon 7.10; TAPS <i>Animal Growth</i></p>		<p style="text-align: center;">Fair Test!</p> <p>Y1/2: OGDEN (<i>Astronomy</i>); Crest (<i>Tea Bag Trouble</i>) Y3/4: TAPS (<i>Animal Skeletons</i>); OGDEN (<i>Space Soils</i>); TAPS (<i>Plant Stems</i>); TAPS (<i>Measuring Plants</i>) Y4/5: TAPS (<i>Materials Drying</i>); TAPS (<i>Forces</i>); OGDEN (<i>Rockets</i>); OGDEN (<i>Parachutes</i>); TAPS (<i>Heartrate Headstands</i>) Y5/6: TAPS (<i>Egg Strength</i>); TAPS (<i>Heartrate Headstands</i>); TAPS (<i>Champion Tape</i>)</p>
	<p style="text-align: center;">Patterns!</p> <p>Y1/2: Crest (<i>Plant Detectives</i>); Crest (<i>Scrap Yard Scraps</i>); Crest (<i>Useless Umbrellas</i>) Y3/4: TAPS (<i>Animal Teeth</i>); TAPS (<i>Measuring Plants</i>) Y4/5: Crest (<i>Tomato Sauce</i>); TAPS (<i>Heart Rate Headstands</i>) Y5/6: Crest (<i>Testing and Comparing Tea</i>); TAPS (<i>Light Shadows</i>); Concept Cartoon 7.10</p>		<p style="text-align: center;">Research!</p> <p>Y1/2: Crest (<i>Animal Adventure</i>); Crest (<i>Rainbow Collectors</i>) Y3/4: TAPS (<i>Living Local Survey</i>); TAPS (<i>Making Shadows</i>) Y4/5: Crest (<i>Outdoor Gym</i>); Crest (<i>Hoodie Hearing</i>); NU Stem (<i>Mini Mangonel</i>); TAPS (<i>Life Cycles</i>) Y5/6: Crest (<i>Recycle/Reuse</i>); TAPS (<i>Invertebrate Research</i>)</p>
	<p style="text-align: center;">Identify and Group!</p> <p>Y1/2: Crest (<i>Useless Umbrella</i>); Crest (<i>Be Seen, Be Safe</i>); Crest (<i>Useless Umbrellas</i>) Y3/4: Crest (<i>Warm or Cold</i>); TAPS (<i>Living Local Survey</i>) Y4/5: Crest (<i>Under Your Feet</i>); Crest (<i>Tomato Sauce</i>); Crest (<i>Under Your Feet</i>) Y5/6: TAPS (<i>Living Outdoors</i>); TAPS (<i>Electricity Brightness</i>); CREST (<i>Fossil Habitats</i>)</p>		<p style="text-align: center;">Language!</p> <p>Y1/2: <i>Odd One Out</i> (3,, 9), PMI (3); Story RSPB; Story <i>Once There Were Giants</i>; Story <i>Handa's Surprise</i>; Story <i>Tadpole's Promises</i>; <i>One Year with Kipper</i>; <i>The Gruffalo</i> Y3/4: <i>Odd One Out</i> (15); PMI (5, 13); Crest (<i>Fossil Folly</i>); TAPS (<i>Electricity Conductors</i>); <i>Big Question</i> (14, 15); Concept Cartoon 2.6/5.1 Y4/5: TAPS (<i>Life Cycles</i>); <i>Odd One Out</i> (17, 16); PMI (14, 16); Concept Cartoons 8.1/8.1/6.3 Y5/6: TAPS (<i>Invertebrate Research</i>); TAPS (<i>Fossil Habitats</i>); PMI (5, 11); <i>Odd One Out</i> (12)</p>
	<p style="text-align: center;">Questioning!</p> <p>Y1/2: <i>Big Questions</i> (4), PMI (3, 7, 8, 9), Story RSPB; Story <i>Once There Were Giants</i>; Story <i>Handa's Surprise</i>; Story <i>Tadpole's Promises</i>; <i>One Year With Kipper</i>; <i>The Gruffalo</i>, Concept Cartoon 2.3 Y3/4: TAPS (<i>Animal Skeletons</i>); <i>Big Question</i> (14, 15); OGDEN (<i>Space Soils</i>); TAPS (<i>Animal Teeth</i>) Y4/5: Crest (<i>Playground Games</i>); <i>Big Questions</i> (11, 18, 19); NU Stem (<i>Mini Mangonel</i>) Y5/6: <i>Big Questions</i> (12, 16); Concept Cartoon 2.12</p>		



Science – EYFS (Granular Steps)

Stage 2 (2-3)

- I can build a tower/throw an object and know that it will fall or drop
- I can describe when something is hot and have some understanding of safety of hot things
- I can be respectful and kind of living things
- I can tell you some things that might feel hot or cold
- I can tell you when it is light and dark



Science in EYFS

The Natural World *(leading into Science)*

The knowledge I am learning;

- To understand the life, growth and decay of living things
- To be able to take care of living things
- To test my ideas about forces, light and dark
- To be able to talk about properties and to be able to discuss how and why they change

Stage 3 (3-4)

- I can ask simple questions about my surroundings
- I can choose clothing with support for going outside in the sunshine or cold
- I can describe some changes in plants and materials
- I understand that some objects sink and use this vocabulary in play
- I can show and explain the concepts of growth, change and decay over time
- I can explain the process of melting e.g. when a solid is heated it will turn into a liquid.
- I can tell you some key facts about plants and animals and how to take care of them
- I can tell you the impact I have on the environment and how I can do my part to look

Stage 4 (4-5)

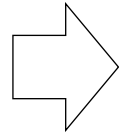
- I can describe where some light sources come from
- I can use the language of magnetic in the right context
- I can talk about seasons and how the weather and temperature changes
- I can experiment with how things change (hot/cold/sink/float/frozen/melted) and describe the changes
- I can explore the natural world around me, making observations and drawing pictures of animals and plants
- I can tell you some similarities and differences between the natural world around me and contrasting environments, drawing on their experiences and what has been read in class
- I can understand some important processes and changes in the natural world around them, including the seasons and changing states of matter



Progression – EYFS to Y6

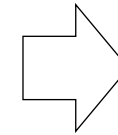
Early Learning Goal

- To understand the life, growth and decay of living things



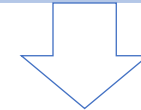
EYFS

- I can describe some changes in plants and materials



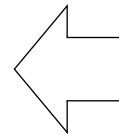
Reception

- I can explore the natural world around me, making observations and drawing pictures of animals and plants



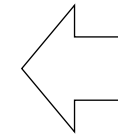
Year 3

- Identify and describe the functions of different parts of flowering plants.
- Explore the requirements of plants for life and growth.



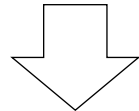
Year 2

- Observe and describe how seeds/bulbs grow into mature plants.
- Find out and describe how plants need water, light and a suitable temperature.



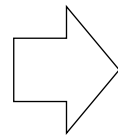
Year 1

- Identify and name a variety of common wild and garden plants.
- Identify and describe the basic structure of common flowering plants (+trees).



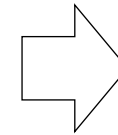
Year 4

- Recognise that living things can be grouped in a variety of ways
- Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.



Year 5

- Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird
- Describe the life process of reproduction.



Year 6

- Recognise that living things have changed over time (fossils provide information)
- Recognise that living things produce offspring of the same kind (offspring vary)
- Identify how animals and plants are adapted to suit their environment.



Biology, Chemistry, Physics Progression

		Biology		
(Y1/2)	Cycle A	Animals including Humans (Y1/2)		Plants (Y1/2)
	<ul style="list-style-type: none"> • Y1 Knowledge: identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals; • Y1 Knowledge: Identify and name a variety of common animals that are carnivores, herbivores and omnivores; • Y2 Knowledge: Notice that animals (humans) have offspring which grow into adults. • INTEGRATED: PMI (3): Y1 Knowledge: describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets); • INTEGRATED: Y2 Knowledge: TAPS (Animals – Handspan): Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. • INTEGRATED: Y2 Knowledge: Story: Handa’s Surprise/Tadpole’s Promise: Find out about and describe the basic needs of animals (humans) for survival (water, food and air). 		<ul style="list-style-type: none"> • Y1 Knowledge: Identify and name a variety of common wild and garden plants • Y2 Knowledge: Identify and describe the basic structure of common flowering plants (+trees). • INTEGRATED: Y1 Knowledge: Identify and describe the basic structure of common flowering plants (+trees). • INTEGRATED: Y2 Knowledge: Find out and describe how plants need water, light and a suitable temperature. 	
	Cycle B	Animals including Humans (Y1/2)	Living things in their Habitats (Y2)	Plants (Y1/2)
		<ul style="list-style-type: none"> • Y1 Knowledge: describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets); 	<ul style="list-style-type: none"> • Explore/compare the differences between things that are living, dead, and things that have never been alive. 	<ul style="list-style-type: none"> • Y1 Knowledge: Identify and name a variety of common wild and garden plants.



Biology, Chemistry, Physics Progression

		<ul style="list-style-type: none"> • Y2 Knowledge: Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. • Y2 Knowledge: Find out about and describe the basic needs of animals (humans) for survival (water, food and air). • INTEGRATED: Y1 Knowledge: Story: RSPB: My First Book of Garden Birds: identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals; • INTEGRATED: Y1 Knowledge: CREST (Animal Adventure): Identify and name a variety of common animals that are carnivores, herbivores and omnivores; • INTEGRATED: Y2 Knowledge: Story: Once There Were Giants: Notice that animals (humans) have offspring which grow into adults. 	<ul style="list-style-type: none"> • Identify that most living things live in habitats to which they are suited. • Identify and name a variety of plants and animals in their habitats, including micro-habitats Describe how animals obtain their food from plants and other animals (simple food chain). 	<ul style="list-style-type: none"> • Y2 Knowledge: Observe and describe how seeds/bulbs grow into mature plants. • INTEGRATED: Y1 Knowledge: Identify and describe the basic structure of common flowering plants (+trees). • INTEGRATED: Y2 Knowledge: Find out and describe how plants need water, light and a suitable temperature. 	
LKS2	(Y3/4)	Cycle A	<p>Animals including Humans (Y3/4)</p> <ul style="list-style-type: none"> • DISCRETE: (Y3 KNOWLEDGE): Identify that animals (+ humans) need the right types and amount of nutrition, and that they cannot make their own food. • DISCRETE: (Y4 KNOWLEDGE): Identify the different types of teeth in humans and their simple functions • DISCRETE: (Y4 KNOWLEDGE): Construct and interpret a variety of food chains, identifying producers, predators and prey. 	<p>Living things in their Habitats (Y4)</p> <ul style="list-style-type: none"> • DISCRETE: Recognise that living things can be grouped in a variety of ways • DISCRETE Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment • INTEGRATED: STORY: The Vanishing Rainforest: Link with recognise that environments can change and that this 	<p>Plants (Y3)</p> <ul style="list-style-type: none"> • DISCRETE: Identify and describe the functions of different parts of flowering plants. • DISCRETE: Explore the requirements of plants for life and growth.



Biology, Chemistry, Physics Progression

Cycle B	<ul style="list-style-type: none"> ● INTEGRATED (Y3 KNOWLEDGE): TAPS: Animal Skeletons ● INEGGRATED (Y4 KNOWLEDGE): Story: "The Little Mole who knew it was none of his Business": Digestive system link ● INTEGRATED (Y4 KNOWLEDGE): Odd One Out (Slide 3-5): Nutrition link 	<p>can sometimes pose dangers to living things</p>	<ul style="list-style-type: none"> ● INTEGRATED: TAPS: Plant Stems: Investigate the way in which water is transported within plants.
	<p style="text-align: center;">Animals including Humans (Y3/4)</p> <ul style="list-style-type: none"> ● DISCRETE: (Y3 KNOWLEDGE): Identify that humans and some other animals have skeletons and muscles for support, protection and movement. . ● DISCRETE: (Y4 KNOWLEDGE): Describe the simple functions of the basic parts of the digestive system in humans ● INTEGRATED (Y3 KNOWLEDGE): Bright Ideas (Slides 3-5): Identify that animals (+ humans) need the right types and amount of nutrition, and that they cannot make their own food. ● INTEGRATED (Y4 KNOWLEDGE): TAPS (Animal Teeth): Identify the different types of teeth in humans and their simple functions ● INTEGRATED (Y4 KNOWLEDGE): PMI: (Slide 5): Construct and interpret a variety of food chains, identifying producers, predators and prey. 	<p style="text-align: center;">Living things in their Habitats (Y4)</p> <ul style="list-style-type: none"> ● INTEGRATED: CREST (Warm or Cold): Recognise that living things can be grouped in a variety of ways ● INTEGRATED: TAPS (Living Local Survey): Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment ● DISCRETE: Recognise that environments can change and that this can sometimes pose dangers to living things 	<p style="text-align: center;">Plants (Y3)</p> <ul style="list-style-type: none"> ● DISCRETE: Investigate the way in which water is transported within plants. ● INTEGRATED: TAPS: Measuring Plants: Identify and describe the functions of different parts of flowering plants; explore the requirements of plants for life and growth.



Biology, Chemistry, Physics Progression

	(Y4/5)	Cycle A		<p>Living Things in their Habitats (Y5)</p> <ul style="list-style-type: none"> DISCRETE: Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird INTEGRATED: Concept Cartoon 1.5: Describe the life process of reproduction in some plant and animals INTEGRATED: Odd One Out: Slide 4: Explore why the plant is living – link with MRS GREN 	
		Cycle B		<p>Living Things in their Habitats (Y5)</p> <ul style="list-style-type: none"> DISCRETE: Describe the life process of reproduction in some plants and animals INTEGRATED: TAPS (LIFE CYCLES): Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird INTEGRATED (Y5 KNOWLEDGE): Story: Charlotte’s Web: Links with different life cycles) 	
UKS2	(Y5/6)	Cycle A	<p>Animals including Humans (Y6) – LINK WITH JIGSAW</p> <ul style="list-style-type: none"> DISCRETE (Y5 KNOWLEDGE): Describe the changes as humans develop to old age (human timeline focus/gestation periods) INTEGRATED: PMI: Slide 5: Describe the changes as humans develop to old age (changes in old age/life expectancy) <p>Animals including Humans (Y5)</p>	<p>Living Things in their Habitats (Y6)</p> <ul style="list-style-type: none"> DISCRETE: Describe how living things are classified into broad groups (including micro- organisms, plants and animals) INTEGRATED: TAPS (INVETEBRATE RESEARCH): Give reasons for classifying plants and animals. 	<p>Evolution and Inheritance (Y6)</p> <ul style="list-style-type: none"> DISCRETE: Describe how things have changes over time and fossils provide information about living thing sthat inhabited Earth millions of years ago. DISCRETE: Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents INTEGRATED: TAPS (Egg Strength):Identify how animals and plants are adapted to



Biology, Chemistry, Physics Progression

Cycle B	<ul style="list-style-type: none"> DISCRETE (Y6 KNOWLEDGE): Identify and name the main parts of the human circulatory system (heart, blood vessels and blood) DISCRETE (Y6 KNOWLEDGE): Describe the ways in which nutrients and water are transported. INTEGRATED (Y6 KNOWLEDGE): CREST: Outdoor Gym (Impact of Exercise) 	<p>suit their environment in different ways and that adaptation may lead to evolution</p>
	<p>Animals including Humans (Y6) – LINK WITH JIGSAW</p> <ul style="list-style-type: none"> DISCRETE (Y5 KNOWLEDGE): Describe the changes as humans develop to old age (changes in old age/life expectancy) INTEGRATED (Y5 KNOWLEDGE): Concept TAPS (Animal Growth): Describe the changes as humans develop to old age (human timeline focus/gestation periods) <p style="text-align: center;">Animals including Humans (Y5)</p> <ul style="list-style-type: none"> DISCRETE (Y6 KNOWLEDGE): Recognise the impact of diet/drugs/lifestyle INTEGRATED (Y6 KNOWLEDGE): TAPS: (Heart Rate Headstands): Story: “Pig Boy Heart”: Identify and name the main parts of the human circulatory system (heart, blood vessels and blood) 	<p>Living Things in their Habitats (Y6)</p> <ul style="list-style-type: none"> DISCRETE: Give reasons for classifying plants and animals INTEGRATED: TAPS (LIVING OUTDOOR KEYS): Describe how living things are classified into broad groups (including micro- organisms, plants and animals)



Biology, Chemistry, Physics Progression

			Chemistry
	(Y1/2)	Cycle A	<p style="text-align: center;">Everyday Materials(Y2):</p> <ul style="list-style-type: none"> • Y1 Knowledge: distinguish between an object and the material from which it is made • Y1 Knowledge: identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock • Y2 Knowledge: find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. • INTEGRATED: Y1 Knowledge: Odd One Out (9): compare and group together a variety of everyday materials on the basis of their simple physical properties. • INTEGRATED: Y1 Knowledge: CREST: Tea Bag Trouble: describe the simple physical properties of a variety of everyday materials • INTEGRATED: Y2 Knowledge: CREST: Be Seen, Be Safe: identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses
		Cycle B	<p style="text-align: center;">Everyday Materials (Y1):</p> <ul style="list-style-type: none"> • INTEGRATED: Y1 Knowledge: OGDEN Astronappy: distinguish between an object and the material from which it is made • INTEGRATED: Y1 Knowledge: OGDEN Astronappy: identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock • INTEGRATED: Y2 Knowledge: TAPS (Rocket Mice): find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. • Y1 Knowledge: compare and group together a variety of everyday materials on the basis of their simple physical properties. • Y1 Knowledge: describe the simple physical properties of a variety of everyday materials • Y2 Knowledge: identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses
LKS2	(Y3/4)	Cycle A	<p style="text-align: center;">Rocks (Y3):</p> <ul style="list-style-type: none"> • DISCRETE: Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties • DISCRETE: Recognise that soils are made from rocks and organic matter.



Biology, Chemistry, Physics Progression

UKS2	(Y4/5)		<ul style="list-style-type: none"> INTEGRATED: CREST (Fossil Folly): Describe in simple terms how fossils are formed when things that have lived are trapped within rock
		Cycle B	<p style="text-align: center;">Rocks (Y3):</p> <ul style="list-style-type: none"> DISCRETE: Describe in simple terms how fossils are formed when things that have lived are trapped within rock. INTEGRATED: OGDEN (Space Soils): Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties INTEGRATED: OGDEN (Space Soils): Recognise that soils are made from rocks and organic matter.
	(Y4/5)	Cycle A	<p style="text-align: center;">States of Mater (Y4):</p> <ul style="list-style-type: none"> DISCRETE: Compare and group materials together (solids, liquids or gases) DISCRETE: Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C) INTEGRATED: TAPS (Materials Drying): Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.
		Cycle B	<p style="text-align: center;">States of Mater (Y4):</p> <ul style="list-style-type: none"> DISCRETE: Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. INTEGRATED: CREST (Tomato Sauce): Compare and group materials together (solids, liquids or gases) INTEGRATED: BIG QUESTIONS (11): Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)
	(Y5/6)	Cycle A	<p style="text-align: center;">Materials and their Properties (Y5):</p> <ul style="list-style-type: none"> DISCRETE: Compare and group together everyday materials on the basis of their properties. DISCRETE: Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution INTEGRATED: CREST (Recuse/Recycle): Explain that some changes result in the formation of new materials.



Biology, Chemistry, Physics Progression

			<ul style="list-style-type: none"> • INTEGRATED: CREST (Testing and Comparing Tea): Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating • INTEGRATED: PMI (11): Demonstrate that dissolving, mixing and changes of state are reversible changes
		Cycle B	<p style="text-align: center;">Materials and their Properties (Y5):</p> <ul style="list-style-type: none"> • DISCRETE: Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating • DISCRETE: Demonstrate that dissolving, mixing and changes of state are reversible changes • DISCRETE: Explain that some changes result in the formation of new materials. • INTEGRATED: TAPS (Champion Tape): Compare and group together everyday materials on the basis of their properties. • INTEGRATED: CREST (Get Set Jellies); BIG QUESTIONS (12); ODD ONE OUT (12): Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution



Biology, Chemistry, Physics Progression

		Physics	
		Seasons (Y1):	
	(Y1/2)	Cycle A	<ul style="list-style-type: none"> Observe changes across the four seasons Observe and describe weather associated with the seasons and how day length varies
		Cycle B	
LKS2		Cycle A	<p>Light (Y3):</p> <ul style="list-style-type: none"> DISCRETE: Recognise that they need light in order to see things and that dark is the absence of light (light is reflected from surfaces) INTEGRATED: Recognise that light from the sun can be dangerous: Video clip and quiz (BBC) INTEGRATED: TAPS (Making Shadows): Recognise that shadows are formed when the light from a light source is blocked by an opaque object INTEGRATED: Find patterns in the changeable sizes of shadows. <p>Electricity (Y4):</p> <ul style="list-style-type: none"> DISCRETE: Identify common appliances that run on electricity DISCRETE: Construct a simple series electrical circuit. INTEGRATED: Concept Cartoon (5.1) Identify whether or not a lamp will light, and recognise that a switch opens and closes a circuit (simple circuit) INTEGRATED: TAPS (Does it conduct electricity?): Recognise some conductors and insulators, and associate metals with conductivity.
		Cycle B	<p>Light (Y3):</p> <ul style="list-style-type: none"> DISCRETE: Recognise that shadows are formed when the light from a light source is blocked by an opaque object DISCRETE: Find patterns in the changeable sizes of shadows. <p>Electricity (Y4):</p> <ul style="list-style-type: none"> DISCRETE: Identify whether or not a lamp will light, and recognise that a switch opens and closes a circuit (simple circuit) DISCRETE: Recognise some conductors and insulators, and associate metals with conductivity.
	(Y3/4)		



Biology, Chemistry, Physics Progression

		<ul style="list-style-type: none"> DISCRETE: Recognise that light from the sun can be dangerous INTEGRATED: Big Question (14): Recognise that they need light in order to see things and that dark is the absence of light (light is reflected from surfaces) INTEGRATED: Big Question (15): Recognise that light from the sun can be dangerous 	<ul style="list-style-type: none"> INTEGRATED: PMI (13): Identify common appliances that run on electricity INTEGRATED: Odd one out (15): Construct a simple series electrical circuit. 	
(Y4/5)	Cycle A	<p>Forces and Magnets (Y3):</p> <ul style="list-style-type: none"> DISCRETE: Compare how things move on surfaces. INTEGRATED: Creative Story Telling (Iron Man): Observe how magnets attract or repel each other/materials. INTEGRATED: Odd One Out (16): Group materials on the basis of magnetism; Notice that some forces need contact between two objects (magnetic forces) INTEGRATED: Concept Cartoon 6.3: Describe magnets as having two poles. <p>Forces (Y5):</p> <ul style="list-style-type: none"> DISCRETE: Explain that unsupported objects fall towards the Earth because of the force of gravity. DISCRETE: Identify the effects of air resistance, water resistance and friction. INTEGRATED: NU Stem (Mini Mangonel): Story: The Tin Snail: 	<p>Sound (Y4):</p> <ul style="list-style-type: none"> DISCRETE: Find patterns between the pitch of a sound and features of the object that produced it DISCRETE: Find patterns between the volume of a sound and the strength of the vibrations. INTEGRATED: CREST (Hoodie Hearing): Identify how sounds are made. INTEGRATED: CREST (Hoodie Hearing): Recognise that vibrations from sounds travel through a medium to the ear 	<p>Earth and Space (Y5):</p> <ul style="list-style-type: none"> DISCRETE: Describe the movement of the Moon relative to Earth DISCRETE: Describe the Sun, Earth and Moon as approximately spherical bodies INTEGRATED: PMI (16): Big Question (20): Use the idea of the Earth's rotation to explain day/night INTEGRATED: Big Questions (19): Describe the movement of the Earth, and other planets, relative to the Sun in the solar system OGDEN: Rockets



Biology, Chemistry, Physics Progression

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Cycle B</p>	<p>Recognise that some mechanisms (levers/pulleys/gears) allow a smaller force to have a greater effect.</p>		
	<p>Forces and Magnets (Y3):</p> <ul style="list-style-type: none"> ● DISCRETE: Observe how magnets attract or repel each other/materials. ● DISCRETE: Group materials on the basis of magnetism. ● DISCRETE: Describe magnets as having two poles. ● DISCRETE: Notice that some forces need contact between two objects (magnetic forces) ● INTEGRATED: Compare how things move on surfaces. ● INTEGRATED: TAPs (Y3: Forces) Notice that some forces need contact between two objects (magnetic forces) <p>Forces (Y5):</p> <ul style="list-style-type: none"> ● INTEGRATED: PMI (14): Explain that unsupported objects fall towards the Earth because of the force of gravity. ● INTEGRATED: PMI (14): Identify the effects of air resistance, water resistance and friction. ● DISCRETE: Recognise that some mechanisms (levers/pulleys/gears) allow a smaller force to have a greater effect. 	<p>Sound (Y4):</p> <ul style="list-style-type: none"> ● DISCRETE: Identify how sounds are made. ● DISCRETE: Recognise that vibrations from sounds travel through a medium to the ear ● INTEGRATED: Odd One Out (17): Find patterns between the pitch of a sound and features of the object that produced it INTEGRATED: Concept Cartoons (8.1 Drums/8.12 Guitarist): Find patterns between the volume of a sound and the strength of the vibrations. 	<p>Earth and Space (Y5):</p> <ul style="list-style-type: none"> ● DISCRETE: Use the idea of the Earth's rotation to explain day/night ● DISCRETE: Describe the movement of the Earth, and other planets, relative to the Sun in the solar system ● INTEGRATED: Big Questions (18): Describe the movement of the Moon relative to Earth ● INTEGRATED: Odd One Out (19): Describe the Sun, Earth and Moon as approximately spherical bodies



Biology, Chemistry, Physics Progression

UKS2	(Y5/6)	Cycle A	<p style="text-align: center;">Light (Y6):</p> <ul style="list-style-type: none"> DISCRETE: Recognise that light appears to travel in straight lines DISCRETE: Use the idea that light travels in straight lines to explain that objects give out or reflect light. DISCRETE: Explain that we see things because light travels from light sources to our eyes. INTEGRATED: TAPS (Light Shadows): Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them. 	<p style="text-align: center;">Electricity (Y6):</p> <ul style="list-style-type: none"> DISCRETE: Associate the brightness of a lamp (volume of a buzzer) with the number and voltage of cells used in the circuit. DISCRETE: Use recognised symbols when representing a simple circuit in a diagram. INTEGRATED: Big Questions (16): Give reasons for variations in how components function (brightness of bulbs, the loudness of buzzers, on/off position of switches) 	
		Cycle B	<p style="text-align: center;">Light (Y6):</p> <ul style="list-style-type: none"> DISCRETE: Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them. INTEGRATED: Concept Cartoon: 7.10: Recognise that light appears to travel in straight lines; Use the idea that light travels in straight lines to explain that objects give out or reflect light. INTEGRATED: Concept Cartoon 7.1: Explain that we see things because light travels from light sources to our eyes.. 	<p style="text-align: center;">Electricity (Y6):</p> <ul style="list-style-type: none"> DISCRETE: Use recognised symbols when representing a simple circuit in a diagram. DISCRETE: Give reasons for variations in how components function (brightness of bulbs, the loudness of buzzers, on/off position of switches) INTEGRATED: TAPS (Electricity Brightness): Associate the brightness of a lamp (volume of a buzzer) with the number and voltage of cells used in the circuit. 	



CUE Assessment

Content: I can describe aspects of science and recall some knowledge and facts.

Understanding: I can explain aspects of science and use evidence and examples when discussing my ideas.

Evaluating: I can analyse and evaluate my ideas and compare and contrast my learning within the context of my previous learning.

		Cycle A			Cycle B			
Year 1/2	Seasonal Changes	<ul style="list-style-type: none"> Content: Can you identify the four seasons? 	<ul style="list-style-type: none"> Understanding: Can you explain how trees change in autumn? 	<ul style="list-style-type: none"> Explain: Can you predict what the trees would be like in each of the four seasons? 	Seasonal Changes	<ul style="list-style-type: none"> Content: Can you identify the four seasons? 	<ul style="list-style-type: none"> Understanding: Can you predict what the weather would be like in each of the four seasons? 	<ul style="list-style-type: none"> Explain: Can you understand and explain how the seasons change your environment?
	Animals including Humans	<ul style="list-style-type: none"> Content: Can you name a carnivore, a herbivores and an omnivores? 	<ul style="list-style-type: none"> Understanding: Can you locate which body parts are related of the five senses? 	<ul style="list-style-type: none"> Explain: Can you compare the life cycles of different animals? 	Animals including Humans	<ul style="list-style-type: none"> Content: Can describe what an invertebrate is? 	<ul style="list-style-type: none"> Understanding: Can explain what an animal needs to survive and why? 	<ul style="list-style-type: none"> Explain: Can you describe the effect of not exercising a enough and/or eating the correct amounts of food?
	Materials	<ul style="list-style-type: none"> Content: Can you identify a variety of everyday materials? 	<ul style="list-style-type: none"> Understanding: Can you explain what happens when you bend an item? 	<ul style="list-style-type: none"> Explain: Can explain the difference between twisting and squashing? 	Materials	<ul style="list-style-type: none"> Content: Can you identify a variety of everyday materials? 	<ul style="list-style-type: none"> Understanding: Can you sort objects by their material? 	<ul style="list-style-type: none"> Explain: Can you choose the best material for an umbrella?



CUE Assessment

	Living Things	<ul style="list-style-type: none"> Content: Can you identify an object that has never been alive? 	<ul style="list-style-type: none"> Understanding: Can you draw a food chain with 4 parts? 	<ul style="list-style-type: none"> Explain: Can you explain why plants and grass help humans survive? 	Living Things	<ul style="list-style-type: none"> Content: Can you identify some living plants and animals and their habitat? 	<ul style="list-style-type: none"> Understanding: Can you explain why a frog lives in a pond? 	<ul style="list-style-type: none"> Explain: Can you compare the habitats and basic needs of different animals?
	Plants	<ul style="list-style-type: none"> Content: Can you name some of the parts of a plant? 	<ul style="list-style-type: none"> Understanding: Can you explain the jobs of different parts of a plant? 	<ul style="list-style-type: none"> Explain: Can you explain what would happen if a plant was not able to get nutrients? 	Plants	<ul style="list-style-type: none"> Content: Can you identify a common wild plant? 	<ul style="list-style-type: none"> Understanding: Can you recall the process a seed/bulb needs to grow? 	<ul style="list-style-type: none"> Explain: Can you compare the different places plants grow and why they grow there?
Year 3/4	Rocks	<ul style="list-style-type: none"> Content: Can you identify the 3 main rock classifications? 	<ul style="list-style-type: none"> Understanding: Can you explain how the 3 main rock classifications are formed? 	<ul style="list-style-type: none"> Explain: Can you compare the different processes which form different rocks? 	Rocks	<ul style="list-style-type: none"> Content: Can you explain what fossilisation is? 	<ul style="list-style-type: none"> Understanding: Can you explain how fossils are formed? 	<ul style="list-style-type: none"> Explain: Can you explain the influence of a scientist on paleontology?
	Light	<ul style="list-style-type: none"> Content: Can you describe how light moves? 	<ul style="list-style-type: none"> Understanding: Can you explain what happens when light hits a surface? 	<ul style="list-style-type: none"> Explain: Can you explain why we can see the moon in the dark? 	Light	<ul style="list-style-type: none"> Content: Can you identify how well different materials block light? 	<ul style="list-style-type: none"> Understanding: Can you explain how a shadow is created? 	<ul style="list-style-type: none"> Explain: Can you predict and record how a shadow changes over time?



CUE Assessment

	Animals including humans	<ul style="list-style-type: none"> Content: Can you name some different types of teeth? 	<ul style="list-style-type: none"> Understanding: Can you explain why teeth are shaped differently? 	<ul style="list-style-type: none"> Explain: Can you compare how animals have different teeth depending on diet? 	Animals including humans	<ul style="list-style-type: none"> Content: Can you name some of the bones from the human body? 	<ul style="list-style-type: none"> Understanding: Can you explain how bones work together to create movement? 	<ul style="list-style-type: none"> Explain: What would happen if a human did not produce saliva?
	Electricity	<ul style="list-style-type: none"> Content: Can you name some common appliances that run on electricity? 	<ul style="list-style-type: none"> Understanding: Can you make a working circuit? 	<ul style="list-style-type: none"> Explain: Can you explain how the circuit works? 	Electricity	<ul style="list-style-type: none"> Content: Can you make a working circuit? 	<ul style="list-style-type: none"> Understanding: Can you explain how electrical insulators impact a working circuit? 	<ul style="list-style-type: none"> Explain: Can you manipulate a circuit by changing its components?
	Living things in their Habitats	<ul style="list-style-type: none"> Content: Can you identify a vertebrate and an invertebrate? 	<ul style="list-style-type: none"> Understanding: Can you explain how you know if something is an invertebrate? 	<ul style="list-style-type: none"> Explain: Can you create a classification key to compare invertebrates? 	Living things in their Habitats	<ul style="list-style-type: none"> Content: Can you name a habitat? 	<ul style="list-style-type: none"> Understanding: Can you explain the impact of changing habitats? 	<ul style="list-style-type: none"> Explain: Can you compare the positive and negative effects that humans have on the environment?
	Plants	<ul style="list-style-type: none"> Content: Can you identify some of the parts of a flowering plants? 	<ul style="list-style-type: none"> Understanding: Can you give 3 examples of what a plant needs to grow well and explain why? 	<ul style="list-style-type: none"> Explain: Can you explain why plants may vary in how much of each thing they need to survive? 	Plants	<ul style="list-style-type: none"> Content: Can you identify some of the parts of a flowering plants? 	<ul style="list-style-type: none"> Understanding: Can you explain how water travels through a plant? 	<ul style="list-style-type: none"> Explain: Can you explain the difference between germination and fertilisation?



CUE Assessment

Year 4/5	States of Matter	<ul style="list-style-type: none"> Content: Can you identify a solid, liquid or a gas by its particles? 	<ul style="list-style-type: none"> Understanding: Can you give an example of when a liquid turns to a solid? 	<ul style="list-style-type: none"> Explain: Can you explain why liquids can be poured? 	States of Matter	<ul style="list-style-type: none"> Content: Can you identify a solid, liquid or a gas by its particles? 	<ul style="list-style-type: none"> Understanding: Can you explain how a liquid turns into a gas? 	<ul style="list-style-type: none"> Explain: Can you relate your knowledge of liquids and gasses to your knowledge of the water cycle?
	Sound	<ul style="list-style-type: none"> Content: What happens when an object vibrates? 	<ul style="list-style-type: none"> Understanding: How does the rate of vibration change when you change a sounds pitch? 	<ul style="list-style-type: none"> Explain: Can you compare the sound waves of a high pitched and loud sound? 	Sound	<ul style="list-style-type: none"> Content: What recognises the vibrations as sounds? 	<ul style="list-style-type: none"> Understanding: How does sound travel? 	<ul style="list-style-type: none"> Explain: Can compare the effects of sound waves travelling through 2 different mediums?
	Forces and Magnets	<ul style="list-style-type: none"> Content: Can you name some of the forces that impact how things move? 	<ul style="list-style-type: none"> Understanding: Can you explain the effects of friction on an object? 	<ul style="list-style-type: none"> Explain: Can you describe how air resistance may positively and negatively impact an aeroplane? 	Forces and Magnets	<ul style="list-style-type: none"> Content: Can you name a magnetic and non magnetic material? 	<ul style="list-style-type: none"> Understanding: Can you explain why some objects are repelled from each other? 	<ul style="list-style-type: none"> Explain: Can you compare the benefit of two different design mechanisms?



CUE Assessment

	Earth and Space	<ul style="list-style-type: none"> Content: Can you name the galaxy that we live in? 	<ul style="list-style-type: none"> Understanding: Can you explain why the moon changes its appearance in the night time sky? 	<ul style="list-style-type: none"> Explain: Can you explain how the moon impacts life on earth? 	Earth and Space	<ul style="list-style-type: none"> Content: Can you describe how the Earth moves in space? 	<ul style="list-style-type: none"> Understanding: Can you explain why we have day and night? 	<ul style="list-style-type: none"> Explain: Can you compare how daylight hours may vary in the northern hemisphere compared with the southern hemisphere?
	Animals including Humans	<ul style="list-style-type: none"> Content: Can you identify some negative impacts on health? 	<ul style="list-style-type: none"> Understanding: Can you explain how exercise can have positive impacts on your health? 	<ul style="list-style-type: none"> Explain: What is the different between a short-term and long-term effect and can you compare 2 examples? 	Animals including Humans	<ul style="list-style-type: none"> Content: Can you identify some of the parts of the circulatory system? 	<ul style="list-style-type: none"> Understanding: Can you explain the journey of a blood cell through the circulatory system? 	<ul style="list-style-type: none"> Explain: How does someone's diet and exercise impact their circulatory system?
	Living Things in their Habitats	<ul style="list-style-type: none"> Content: Can you draw the life cycle of a mammal? 	<ul style="list-style-type: none"> Understanding: Can you explain the different stages of the life cycles? 	<ul style="list-style-type: none"> Explain: Can you compare the life cycle of a mammal and an amphibian? 	Living Things in their Habitats	<ul style="list-style-type: none"> Content: Can you identify the male and female gametes in a plant? 	<ul style="list-style-type: none"> Understanding: Can you explain which plants use asexual and sexual reproduction? 	<ul style="list-style-type: none"> Explain: Can you consider the benefits and drawbacks of plants using asexual reproduction?



CUE Assessment

Year 5/6	Properties and Changes of Materials	<ul style="list-style-type: none"> Content: Can you identify some magnetic objects? 	<ul style="list-style-type: none"> Understanding: Can you classify objects based on their conductivity? 	<ul style="list-style-type: none"> Explain: Can you compare objects with good thermal conductivity to objects with good electrical conductivity? 	Properties and Changes of Materials	<ul style="list-style-type: none"> Content: Can you name some methods of separation? 	<ul style="list-style-type: none"> Understanding: Can you explain what filtering is? 	<ul style="list-style-type: none"> Explain: Can you compare a reversible change with an irreversible change?
	Electricity	<ul style="list-style-type: none"> Content: Can you represent components of a working circuit using symbols? 	<ul style="list-style-type: none"> Understanding: Can you explain how a bulb can be made brighter? 	<ul style="list-style-type: none"> Explain: Can you identify how bright a bulb will be within a circuit from a pictorial representation? 	Electricity	<ul style="list-style-type: none"> Content: Can you represent components of a working circuit using symbols? 	<ul style="list-style-type: none"> Understanding: Can you explain what slows electricity down in a circuit? 	<ul style="list-style-type: none"> Explain: Can you identify weaknesses in a circuit from a pictorial representation?
	Light	<ul style="list-style-type: none"> Content: Can you describe how light travels? 	<ul style="list-style-type: none"> Understanding: Can you explain how a reflection is created? 	<ul style="list-style-type: none"> Explain: Can you compare the structure of light waves to sound waves? 	Light	<ul style="list-style-type: none"> Content: Can you state a way in which the appearance of light can be altered? 	<ul style="list-style-type: none"> Understanding: Can you explain why the appearance of light changes? 	<ul style="list-style-type: none"> Explain: Can you compare how shadows may vary in winter compared with summer?



CUE Assessment

	Evolution and Inheritance	<ul style="list-style-type: none"> Content: Can you explain what inheritance means? 	<ul style="list-style-type: none"> Understanding: Can you explain how palaeontologist have supported the concept of evolution? 	<ul style="list-style-type: none"> Explain: Can you explain how humans have been able to survive over the last couple of thousand years and compare this to an animal who hasn't? 	Evolution and Inheritance	<ul style="list-style-type: none"> Content: Can you recognise an animal that has adapted to their environment? 	<ul style="list-style-type: none"> Understanding: Can you explain an advantageous adaption of an animal? 	<ul style="list-style-type: none"> Explain: Can you compare animals which have adapted well to those which have maladapted?
	Living Things in their Habitats	<ul style="list-style-type: none"> Content: Can you identify some of the factors you might use to classify an animal? 	<ul style="list-style-type: none"> Understanding: Can you describe the stages of classification for an animal? 	<ul style="list-style-type: none"> Explain: Can you explain the influence of Carl Linnaeus? 	Living Things in their Habitats	<ul style="list-style-type: none"> Content: Can you name some microorganisms? 	<ul style="list-style-type: none"> Understanding: Can you describe where microorganisms can be found? 	<ul style="list-style-type: none"> Explain: Can you explain give examples of the difference between helpful and harmful microbes?
	Animals including Humans	<ul style="list-style-type: none"> Content: Can you describe the changes undertaken by a human from infancy to adolescence? 	<ul style="list-style-type: none"> Understanding: Can you identify the key development stages of a human? 	<ul style="list-style-type: none"> Explain: Can you compare the changes to a human at the different stages of their life? 	Animals including Humans	<ul style="list-style-type: none"> Content: Can you describe the changes undertaken by a human from middle adulthood to late adulthood? 	<ul style="list-style-type: none"> Understanding: Can you explain why human health starts to deteriorate? 	<ul style="list-style-type: none"> Explain: Can you compare the life expectancy and gestation period of 2 different animals?