
















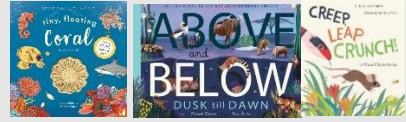
Year A (2023/24)			
Year 1/2 year 1 year 2	Core knowledge	Additional knowledge ways of achieving this discretely	Scientific enquiry questions (working scientifically skills)
term 1	Seasonal changes (Autumn) -observe changes across the four seasons -observe and describe weather associated with the seasons	-describe how day length and weather varies (could achieve this through discussion)	 Pattern seeking: do trees with bigger leaves lose their leaves first in autumn? Ask questions
			 Research and secondary sources: In which season do certain plants grow? Gather and record results
			 Observing over time: What happens to the leaves at different points in the year? Gather and record results
	Key scientist and Science capital opportunities: -Talk with a local farmer about seasonal changes and the effects they have on their job -Farm ed Barbara Edwards (first female meteorologist on BBC)		Linked texts: 
term 2	Materials -distinguish between an object -identify and name a variety of everyday materials -identify and compare the suitability of a variety of everyday materials	-describe the simple physical properties of a variety of everyday materials -find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. (could achieve this through discussions and observations during experiments)	 Observing changes over time: What happens to materials over time if we bury them in the ground? Would a paper boat float forever? Observe and measure
			 Comparative testing and fair testing: Which material would be best for the roof of the little pig's house? Plan an enquiry
	Key scientist and Science capital opportunities: -Trip to Science Oxford Charles Macintosh (Inventor of waterproof fabric) Julie Brusaw (Solar Roadways inventor, material engineer)		Linked texts: 
term 3	Seasonal changes (Winter) -observe changes across the four seasons -observe and describe weather associated with the seasons	-describe how day length and weather varies	 Research and secondary sources: In which season do certain plants grow? Gather and record results
			 Observing over time: What happens to the daffodil bulb at different points of the year? observe and measure
	Key scientist and Science capital opportunities:		Linked texts: 
term 4	Animals including humans -describe and compare the structure of a variety of common animals -identify and name a variety of common animals	-identify the basic parts of the human body and say which part of the body is associated with each sense -describe the importance for humans to exercise, eat the right	 Identifying, classifying and grouping How can you group animals you find at the zoo? Can you group animals based on what they eat? present results 







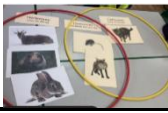
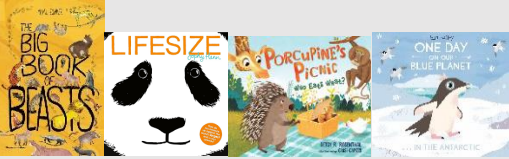




	<p>- notice that animals, including humans, have offspring which grow into adults</p>	<p>amount of different food and hygiene. - find out about the basic needs of animals, including humans, for survival (could do this through discussion about what we need to survive and stay healthy)</p>	<p>Research and secondary sources: Do all animals offspring look like the adult? Ask questions</p> 
	<p>Key scientist and Science capital opportunities: -Trip to the zoo/ farm park - ask a Vet to come in and show x-rays of different animals</p> <p>Chris Packham (Animal Conservationist) Steve Irwin (Crocodile Hunter, conservationist and TV presenter)</p>		<p>Linked texts:</p> 
<p>term 5</p>	<p>Seasonal change (spring) -observe changes across the four seasons -observe and describe weather associated with the seasons</p> <p>Plants -identify and name a variety of common wild and garden plants - find out and describe how plants need water, light and a suitable temperature to grow and stay healthy</p>	<p>-describe how day length and weather varies</p> <p><i>plants</i> -identify and describe the basic structure of a variety of common flowering plants, including trees - observe and describe how seeds and bulbs grow into mature plants (this will happen when finding out what plants need to stay healthy)</p>	<p>Pattern seeking: Do the trees which lose their leaves first blossom first? Gather and record results</p> <p>Observing over time: What happens to the daffodil bulb at different points of the year? Observe and measure</p> <p>Research and secondary sources: In which season do certain plants grow? Gather and record results</p> <p style="text-align: center;">Plants</p> <p>Comparative testing and fair testing: Is there the same level of light in the evergreen wood compared to the deciduous wood? Plan an enquiry</p> <p>Research using secondary sources: How does a cactus survive in a desert with no water? Ask questions</p>
	<p>Key scientist and Science capital opportunities: -Trip to an arboretum, park or garden centre</p> <p>Alan Titchmarsh (Botanist & Gardener) Joseph Banks (Botanist) Beatrix Potter (Author & Botanist)</p>		<p>Linked texts:</p> 
<p>term 6</p>	<p>Living things and their habitats - explore and compare the differences between things that are living, dead, and things that have never been alive -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.</p>	<p>-identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other - identify and name a variety of plants and animals in their habitats, including microhabitats (when teaching about animals obtaining food, explore what a habitat is and why that may effect the food they eat)</p>	<p>Identifying, classifying and grouping How can you group things to show which are living, dead or have never been alive?</p> <p>Pattern seeking Are there more birds on the paddock when there are more worms about? Present and interpret results</p> <p>Comparative testing and fair testing: Do slugs prefer to eat leaves or flowers? Plan an enquiry</p>












Key scientist and Science capital opportunities:



David Attenborough (naturalist, TV Presenter)
Liz Bonnin (Conservationist)
Gerald Durrell (naturalist, zookeeper, conservationist)

Linked texts:



Year B (2024/25)			
Year 1/2 year 1 year 2	Core knowledge	Additional knowledge (ways of achieving this discretely alongside lessons)	Scientific enquiry (working scientifically skills)
term 1	<p>Animals including humans</p> <p>-identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense</p> <p>- describe the importance for humans to exercise, eat the right amount of different food and hygiene.</p> <p>- find out about and describe the basic needs of animals, including humans, for survival</p>	<p>- notice that animals, including humans, have offspring which grow into adults</p> <p>(Discussion through stories and songs. Discuss what different animals need and why)</p>	 <p>Pattern seeking: do you get better at seeing/ smelling as you get older? Does your heart beat faster if you exercise? Gather and record results</p>
			 <p>Identifying, classifying and grouping: What are the names of all of the parts of our body?</p> <p>Comparative testing and fair testing do bananas make us run faster? Is our sense of smell better if we're blindfolded? How far can germs spread in an hour? Present and interpret results</p> 
<p>Key scientist and Science capital opportunities:</p> <ul style="list-style-type: none"> - Visits from a doctor/ dentist to discuss how to stay healthy - Visit from a sports person <p>Adelle Davis (20th Century Nutritionist) Robert Winston (Human Scientist) Florence Nightingale (Pioneer of modern nursing in GB)</p>		<p>Linked texts:</p> 	
term 2	<p>Animals including humans</p> <p>- identify and name a variety of common animals that are carnivores, herbivores and omnivores</p>	<p>-describe and compare the structure of a variety of common animals</p> <p>-identify and name a variety of common animals</p> <p>(discuss the structure of the animals and how they are able to eat what they do)</p>	 <p>Pattern seeking: do bigger animals eat more food? Observe and measure</p>
			 <p>Identifying, classifying and grouping: How could we organise a group of animals?</p> 
<p>Key scientist and Science capital opportunities:</p> <ul style="list-style-type: none"> - Trip to the zoo/ wildlife park (to see a feeding) <p>Steve Backshall (TV presenter) Edward Wilson (An artist who went with Scott to Antarctica- was based in Cheltenham) British Antarctic survey (various projects to explore)</p>		<p>Research and secondary sources: How are animals in Antarctica different to animals in the UK? Ask questions</p> <p>Linked texts:</p> 	
term 3	<p>Seasonal changes (Winter)</p> <p>-Describe how day length and weather varies</p> <p>-observe changes across the four seasons</p>	<p>-observe and describe weather associated with the seasons</p>	 <p>Research and secondary sources: Are there plants that have leaves in every season? Observe and measure</p>
			 <p>changes over time: What will happen to the weather during winter? Gather and record results</p> 
			 <p>Comparative/ fair testing In which season does it rain the most? Gather and record results</p>

	Key scientist and Science capital opportunities: Dr Steve Lyons (Extreme Weather)		Linked texts: 
term 4	Plants -identify and describe the basic structure of a variety of common flowering plants, including trees - observe and describe how seeds and bulbs grow into mature plants	-identify and name a variety of common wild and garden plants (plant hunt around school) - find out and describe how plants need water, light and a suitable temperature to grow and stay healthy (bring it in to planning the enquiry)	 changes over time: How does my sunflower change over the year? What happens to my bean when we plant it? Observe and measure  Comparative testing and fair testing: which type of compost grows the tallest sunflower? which trees have the biggest leaves? Plan an enquiry Present results  Pattern seeking: Do bigger seeds grow into bigger plants? Present results
	Key scientist and Science capital opportunities: - Explore a local wildflower meadow Beatrix Potter (Author & Botanist) Tree planting (woodland trust) https://www.woodlandtrust.org.uk/plant-trees/schools-and-communities/		Linked texts: 
	Materials -distinguish between an object and a material -describe the simple physical properties of a variety of everyday materials - compare and group together a variety of everyday materials on the basis of their simple physical properties -find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.	-identify and name a variety of everyday materials -identify and compare the suitability of a variety of everyday materials (this will be achieved through testing)	 Identifying, classifying and grouping: Which materials are shiny, and which are dull? Which are transparent and which are opaque? Which are flexible and which are rigid? Present results  Comparative testing and fair testing: Which shape makes the strongest paper bridge? Which materials are the most absorbent? Observe and measure 
	Key scientist and Science capital opportunities: -Science oxford workshop (discovering materials) Julie Brusaw (Solar Roadways inventor, material engineer) John Loudon McAdam (Inventor of macadam road surfacing)		Linked texts: 
term 6	Seasonal change (summer) -observe changes across the four seasons - Describe how day length and weather varies Living things and their habitats -identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of	- identify the differences between things that are living, dead, and things that have never been alive -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.	 Identifying, classifying and grouping: how would you group plants and animals based on what habitat you would find them in? Present results  Pattern seeking: Is there a pattern in where we find moss growing in the school grounds? what conditions to woodlice prefer to live in? Gather and record results seasonal change

	<p>different kinds of animals and plants, and how they depend on each other</p> <ul style="list-style-type: none"> - identify and name a variety of plants and animals in their habitats, including microhabitats 	<p>(when creating ideal habitats discuss what they need in order to survive)</p>	 <p>Pattern seeking: Do the days get longer the hotter the weather gets? <i>Ask questions</i></p>
	<p>Key scientist and Science capital opportunities:</p> <ul style="list-style-type: none"> -Science Oxford- creature creations workshop -forest school opportunities <p>Gerald Durrell (naturalist, zookeeper, conservationist)</p>		 <p>Changes over time: What will happen to the weather during Summer? <i>Observe and measure</i></p> <p>Linked texts:</p> 