

## Science KS1

EYFS					
Children will explore the natural world around them. They will record their observations in different ways and draw various animals and plants they see. They will develop an understanding of changes that take place in the natural world, focusing in particular on seasonal change and changes in states of matter.					
Highlighted are the types of enquiry when working scientifically. These include: comparative / fair testing • research • observation over time • pattern seeking • identifying, grouping and classifying • problem solving					
Cycle A			Cycle B		
Y1/2			Y1/2		
I can associate types of weather with particular seasons.					
Autumn Y1	Spring Y1	Summer Y2	Autumn Y1	Spring Y2	Summer Y1
<b>Seasonal changes</b>  I can reflect on prior knowledge and ask scientific questions. I can identify a particular month with a season.  2..I can say that day length in summer is longer than winter.  3.I can describe how the weather changes across the seasons.  3.I can observe and describe the weather in autumn.  4.I can discuss how the day length varies from season to season.  5. I can explain that some animals adapt in the winter.	<b>Animals including humans (biology)</b>  1. I can identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals  <b>Research</b> <i>Identifying, grouping and classifying.</i>  2. I can describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) <b>Research</b> <i>Identifying, grouping and classifying.</i>  3. I know that animals, including humans, have offspring which grow into adults  4. I can research and describe the basic needs of animals, including	<b>Plants (biology)</b>  1. I can reflect on prior knowledge and ask scientific questions. <b>Problem solving</b>  2. I can look closely at plants and draw what I can see. <b>Research</b>  3. I can plant seeds and bulbs and suggest how to care for them. <b>Observations over time.</b>  4. I can find out how much water and sunlight plants need. I can investigate suitable temperatures for plants to stay healthy. <b>Comparative/ fair testing.</b>  5. I can observe how my plants have grown. <b>Observations over time.</b>  6. I can make a bar chart to show the growth of my plants.	<b>Seasonal Changes (biology)</b>  1.I know what events take place in each season.  2. I know how temperature changes during the seasons.  3. I can find out what different weather types there are.  4.I know what weather type we associate with each season.  5. I can make observations across the year of how plants change throughout the year.	<b>Animals including humans (biology)</b>  1.I can describe the life cycle of humans. <b>Pattern seeking</b>  I can describe the life cycle of some animals, including insects.  I can say that the offspring of animals grow into adults who produce more offspring <b>Problem solving</b> <b>Research.</b>  2. I can recognise and describe the life cycle of animals, including humans, from birth to adulthood. <b>Pattern seeking</b>  3. I can identify and describe the similarities and differences in life cycles. <b>Pattern seeking, Research, observstion</b>  4. I can investigate and compare the fundamental need of	<b>Plants (biology)</b>  1.I can identify the parts of plants. <b>Research</b> <i>Identifying, grouping and classifying.</i>  I can identify and describe the basic structure of a variety of common flowering plants, including trees. <b>Research</b> <i>Identifying, grouping and classifying.</i>  2.I can explore the local area to see the plants and flowers growing there. <b>Research</b>  3.I can identify some plants that have bulbs, and some that have seeds. <b>Research</b> <i>Identifying, grouping and classifying.</i>



	humans, for survival (water, food and air)			<p>animals (including humans) for survival. <b>Research</b></p> <p>5. I can explain the significance of exercise, balanced nutrition and hygiene in maintaining human health. <b>Identifying, grouping and classifying</b></p>	<p>5.I can identify leaves I have collected. <b>Research</b> <b>Identifying, grouping and classifying.</b></p> <p>6.I can describe the difference between deciduous and evergreen trees. <b>Research</b> <b>Identifying, grouping and classifying.</b></p>
<p><b>Outcome</b></p> <p>Children can observe changes across the four seasons: children can describe weather associated with the seasons and how the length of days varies due to this</p>	<p><b>Outcome</b></p> <p>Children can classify and compare animals into fish, amphibians, reptiles, birds and mammals</p>	<p><b>Outcome</b></p> <p>Children can observe and describe how seeds and bulbs grow into mature plants and find out and describe how plants need water, light and a suitable temperature to grow and stay healthy</p>	<p><b>Outcome</b></p> <p>Children observe the changes in the weather and seasons across the year.</p>	<p><b>Outcome</b></p> <p>Children will know that animals (including humans) have offspring which grows into adults: children will discover the basic needs of animals – food, water and air: children will understand the importance of exercise, diet and hygiene</p>	<p><b>Outcome</b></p> <p>Children can identify and name common wild and garden plants, including deciduous and evergreen trees.</p> <p>Children can observe the changes in plants and trees across the year.</p>
<p><b>Vocabulary</b></p> <p>Hibernate, Axis, orbit, temperature, thermometer, compass, shadow</p>	<p><b>Vocabulary</b></p> <p>Amphibian, mammal, fish, bird, reptile, carnivore, herbivore, omnivore</p>	<p><b>Vocabulary</b></p> <p>Seed, Bulb, Growth, Stem, Leaf, Flower, Root. Germination</p>	<p><b>Vocabulary</b></p> <p>Autumn, Winter, Spring, Summer</p>	<p><b>Vocabulary</b></p> <p>life cycle, adulthood, offspring, survival needs, exercise, balanced nutrition, hygiene, health</p>	<p><b>Vocabulary</b></p> <p>Seed, Bulb, Growth, Stem, Leaf, Flower,</p>
<p><b>Everyday materials (chemistry) Y2</b></p> <p>.I can reflect on prior knowledge and ask scientific questions.</p> <p>2. I can identify uses of everyday materials. <b>Identifying, grouping and classifying.</b></p> <p>3. I can explore the suitability of wood, metal, plastic, glass, brick,</p>	<p><b>Living things and their habitats (biology) Y2</b></p> <p>1. I can classify things as alive, dead or never been alive. <b>Research</b> <b>Identifying, grouping and classifying.</b></p> <p>2. I can name and compare different types of habitats.</p>		<p><b>Animals including humans (biology) Y1</b></p> <p>1.I can draw the human body and label the parts <b>Identifying, grouping and classifying.</b></p> <p>2.I can identify the parts of the body associated with each sense. <b>Identifying, grouping and classifying.</b></p>	<p><b>Everyday materials Y1</b></p> <p>1. I can identify and name a variety of everyday materials. <b>Identifying, grouping and classifying.</b></p> <p>2.I can link the physical properties of materials to their use. <b>Identifying, grouping and classifying.</b></p>	<p><b>Animals including humans (biology) Y1</b></p> <p>1.I can identify types of animals.</p> <p>I can name some animals in each type. <b>Identifying, grouping and classifying.</b></p>

<p>rock, paper and cardboard for particular uses. <b>Comparative/fair testing</b></p> <p>4. I can explore how some materials can be changed by squashing, bending, twisting and stretching. <b>Comparative/fair testing</b></p> <p>5. I can explain about recycling.</p>	<p>I can consider which animals live there. <b>Research</b> <i>Identifying, grouping and classifying.</i></p> <p>3. I can explain how these living things are adapted to their habitat. I can identify some of the foods that different animals eat. <b>Research</b> <i>Identifying, grouping and classifying.</i></p> <p>4.I can recognise and name different plants and animals that live in their habitats, including the little homes within the bigger places. (microhabitats) <b>Research</b> <i>Identifying, grouping and classifying.</i></p> <p>5. I can observe how plants and animals depend on each other for food, showing how energy moves from one to another. <b>(Problem solving)</b> <b>Observation over time</b></p>		<p>3.I can identify some factors which affect taste.</p> <p>4. I can compare other animals describing how they use their senses to compare different textures, sounds and smells. (either first hand using videos or photographs) <b>Research</b></p>	<p>3. I can distinguish between an object and the material from which it is made. <b>Identifying, grouping and classifying.</b></p> <p>4 I can test different materials. <b>Comparative fair test</b></p> <p>DT link I can identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses (design and make –use stories for investigation Little Pigs? Protecting an Egg etc.)</p>	<p>2.I can describe some of the features of each type of animal.</p> <p>I can classify an animal from information I’m given about their features.</p> <p>3.I can describe the difference between a carnivore, herbivore and omnivore. I can give examples of carnivores, herbivores and omnivores. <b>Research</b></p>
<p><b>Outcome</b> Children learn the suitability of different materials for particular uses: to find that some solid objects can change shape by being squashed, bent, twisted and stretched.</p>	<p><b>Outcome</b> Children will compare the differences between things that are living, dead and things that have never been alive: children can identify the suitability of different habitats: children can name a variety of animals and plants and their habitats: children can understand a simple food chain.</p>		<p><b>Outcome</b> Children can label basic parts of the human body. They can say which part of the body is associated with each sense.</p>	<p><b>Outcome</b> Children can distinguish between an object and the material that it is made from: children can identify materials such as wood, plastic, glass, metal, water and rock: children can describe, compare and group materials based on their physical properties</p>	<p><b>Outcome</b> To learn about carnivores, herbivores and omnivores</p>
<p><b>Vocabulary</b> Absorbent, bendy, flexible, foil, material, opaque, translucent, transparent, waterproof</p>	<p><b>Vocabulary</b> Dead, Alive, Sensitive, Habitat, Microhabitat Adaption, Classify,</p>		<p><b>Vocabulary</b> Sense, Taste, Smell, Touch, Sight, Hearing</p>	<p><b>Vocabulary</b> Transparent, waterproof, absorbent, material, solid, property, stretchy, bouncy,</p>	<p><b>Vocabulary</b> Food Chain, Predator, Prey, Producer, Carnivore,</p>

	Food Chain, Predator, Prey, Producer, Omnivore,			elasticity, twist, bend, fold, pull, squeeze, hard, sort, rough, smooth, shiny dull, suitable, unsuitable	Herbivore, Omnivore, Hunter, Diet, Nutrition
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