

EYFS	Observing Over Time	Pattern Seeking	Identifying, Classifying and Grouping	Fair Testing	Research	Continuous Provision
All About Me/Once Upon a Time	<p>Autumn walks – setting up the Autumn table.</p> <p>Planting Spring bulbs.</p> <p>Weather activities – scarves in the wind, drawing around puddles, watching changes in ice and snow.</p> <p>Baking Gingerbread men and making porridge.</p>	Measuring ourselves on the height chart – are boys bigger than girls?	<p>Sorting images of ourselves – e.g. hair colour</p> <p>Comparing features with a partner using a mirror.</p> <p>Leaf sorting.</p>	N/A	<p>Books about ourselves – ‘Wonderful Me.’</p> <p>Texts about seasons – ‘Seasons Come, Seasons Go.’</p> <p>Nature walks.</p> <p>Animals/insect books.</p>	<p>Water</p> <p>Sand</p> <p>Ramps</p> <p>Magnets</p> <p>Light Filters</p> <p>Allotment</p>
People Who Help Us	<p>Observing the growth of crocuses, daffodils and tulips.</p> <p>Re-measuring our height.</p> <p>Spring walk</p>	Keeping a weather chart over time.	<p>Role play – recycling – sorting materials – metal, paper or plastic.</p> <p>Testing and sorting materials into waterproof and not waterproof.</p> <p>Comparing fingerprints.</p>	N/A	<p>Books – e.g. Spring is Here</p> <p>Visit from a dentist/doctor to ask questions.</p>	<p>Water</p> <p>Sand</p> <p>Ramps</p> <p>Magnets</p> <p>Light Filters</p> <p>Allotment</p>

	How does water change – frost, snow, ice		Exploring high visibility materials			
Plants	<p>Allotment – planting beans (link to Jack and the beanstalk.)</p> <p>Watching caterpillars grow into butterflies.</p> <p>Looking at decay in daffodils.</p> <p>Nature walk.</p>	<p>Introduction to habitats e.g. where do we find woodlice?</p> <p>Minibeasts – Are all minibeasts red?</p> <p>Measuring our beanstalks – Are those closer to the window taller?</p>	<p>Photographing plants/animals/minibeasts.</p> <p>Matching minibeast to photos.</p> <p>Sorting – e.g. number of legs on a minibeast.</p> <p>Exploring new fruits – describing/exploring/comparing seeds, size, colour.</p> <p>Describing/sorting African animals</p>	N/A	<p>Bean/Butterfly life cycle books.</p> <p>Stories set in Africa.</p> <p>Animal books.</p>	<p>Water</p> <p>Sand</p> <p>Ramps</p> <p>Magnets</p> <p>Light Filters</p> <p>Allotment</p>

Year 1	Observing Over Time	Pattern Seeking	Identifying, Classifying and Grouping	Fair Testing	Research	Scientists
Materials		<p>Sorting materials and looking at everyday objects.</p> <p>Finding different materials in the environment.</p>	<p>Grouping materials by their property.</p> <p>Classifying materials by their type</p>	<p>Making a tent or a towel for a teddy. Which is the best material for each?</p>		Stephanie Kwolek.
Animals including Humans		<p>Looking at different animal groups – e.g. claws on carnivores and hooves on herbivores.</p>	<p>Grouping animals by their characteristics.</p>	<p>Senses experiments – blind tasting of different crisps flavours.</p>	<p>Animal encyclopaedias.</p> <p>Farm on wheels visit</p>	

			Looking for minibeasts – who eats me?		Exotic Zoo trip.	
Plants	Planting a bean seed – how does it grow? Record over time.	How do plants change through the seasons?	Identify leaves and flowers. Observing flowers from botanist drawings	Planting bean seeds in different places.	Reading about famous botanists.	Carl Linnaeus.
Seasons Continuous Provision	Changes throughout the year – take photos of the same place and look at the changes.	Changes to leaves – look at evergreen trees.	Compare temperatures. Look at similarities and differences between the seasons as they change.			

<u>Year 2</u>	<u>Observing Over Time</u>	<u>Pattern Seeking</u>	<u>Identifying, Classifying and Grouping</u>	<u>Fair Testing</u>	<u>Research</u>	<u>Scientists</u>
Materials			Sorting materials based on their properties.	Testing different materials to see which are waterproof/absorbent?		George McAdam.
Animals including Humans	Watching animals grow – frogspawn.	What are the effects of exercise on the body.	Sorting food into food groups.	Germns on our hands - Washing our hands in glitter to see how germs are passed on.	Finding out about life cycles.	
Plants	Watching plants grow from a seed.		Sorting bulbs and seeds.	Growing seeds in different places.	Naming plants. Finding out how to grow a seed.	

Living Things and Their Habitats	Cut plants in the classroom.		Explore the outside to find habitats, plants and animals.			
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Year 3 and 4 Year A	Observing Over Time	Pattern Seeking	Identifying, Classifying and Grouping	Fair Testing	Research	Scientists
Animals including Humans	What is the impact of sugar on eggshells.		Grouping animals - Carnivores Herbivores Omnivores	Sugar on eggshells investigation.	Looking at different kinds of teeth.	
Light and Shadows	Effect of sun cream UV beads.		Identifying natural and man-made sources. Shining light on different objects – opaque/transparent/translucent. Identify and sort reflective materials.	Sun cream investigation. Effect of sun cream UV beads.		
Rocks and Soils			Grouping and sorting rocks. Sorting natural and man-made rocks.	Permeability test – using different rocks.	Finding out about Mary Anning.	Mary Anning.
Sound	Observing how sound is produced by vibrations.	Investigating how the harder the hit the louder the volume.		Testing – how pitch and volume can be changed.		Alexander Graham Bell.

	String telephones	Investigating the length of string and how this effects pitch.				
Electricity		Investigating what happens when we add more batteries into a circuit with a bulb?		Investigating conductors and insulators.	Changing components used in a circuit.	Thomas Edison.

Year 3 and 4 Year B	Observing Over Time	Pattern Seeking	Identifying, Classifying and Grouping	Fair Testing	Research	Scientists
Plants	Compare plants growing in different conditions. Observing transportation of water over time .		Dissect and identify the parts of plants. Classify seeds by their dispersal.		Finding out about seed dispersal.	
Living Things and Habitats			Sorting invertebrates and vertebrates into groups. Grouping living things into different groups. Classification keys to name unknown living things. Minibeast hunt.		What is the human impact on environment.	

Forces and Magnets	Experimenting with magnetic field and iron fillings.		Sorting magnetic and non-magnetic materials.	Investigating different surfaces and friction Looking at the size/type of magnets and how this effects their strength.		Isaac Newton.
Solids, Liquids and Gas	What is the melting point of chocolate. Observing evaporation/condensation Melting materials – observation of changing state.		Solids, Liquids, Gas sorting things into the correct state.	Investigating the melting point of chocolate/wax/butter How fast does water evaporate?	Finding out about the water cycle.	
Animals including humans		If you have a longer femur are you taller?	Food groups – sorting foods into the correct group. Sorting types of skeletons based on research.		Looking at food labels for nutritional value. Research the function of a skeleton.	

Year 5 and 6 Year A	Observing Over Time	Pattern Seeking	Identifying, Classifying and Grouping	Fair Testing	Research	Scientists
Living things and their habitats (Y6) (microorganisms/classification)	Observe food going mouldy and the reaction of yeast.		Branching key database on organisms. Creating our own key to classify living things.		Micro Organisms.	

			Exotic Zoo visit – classifying animals.			
Evolution and inheritance (Y6)	How skeletons have changed over time – looking at fossils.	Beak experiment – what do birds have in common?	Identifying inherited characteristics. Adaptive traits – identifying habitats.		Charles Darwin.	Charles Darwin.
Animals including humans (Y6) (systems of the body)	Measuring heartbeats before and after exercise.	Looking for patterns in heartbeats.	Grouping food and nutritional values.	Measuring heart beats.	Story of diet. How muscles work and how to exercise different muscles.	James Lind.
Light (Y6)				How can we change shadows?	The eye.	
Electricity (Y6)				What effects the brightness of a bulb. Investigate the length of wire in a circuit.		Thomas Edison.

Year 5 and 6 Year B	Observing Over Time	Pattern Seeking	Identifying, Classifying and Grouping	Fair Testing	Research	Scientists
Forces (Y5)		Levers – investigating the distance from the fulcrum.		Effects of air resistance and water resistance Creating own parachute to test the effects of air resistance. Looking at different surfaces – friction	Find out how levers work through practical investigation.	Isaac Newton.
Animals including	Life cycle – stages of a human	Patterns in the needs of babies.	Venn diagram – puberty			

humans (Y5) (lifecycle of a human)		Growth charts – predicting height. Patterns in gestation periods and offspring/size of the animal.				
Earth and space (Y5)	What makes a day, month and year?	Comparing hours of Sunlight in England and other countries.			Research into planets. Trip to the Space Centre. Geocentric and Heliocentric models.	Copernicus. Galileo.
Living things and their habitats (Y5) (life cycles and reproduction of plants and animals)	Observing – lifecycles of plants and animals	Similarities and differences in life cycles.	Sorting sexual and asexual plants.		Research into different lifecycles. Different ways that plants reproduce.	Jane Goodall.
Properties and changes of materials (Y5)	Dissolving and evaporation. Reversible and irreversible changes – tablets and sand in water.		Grouping materials.	Investigating dissolving. Insulation – which material insulates more?		

