



Science Progression/Coverage Map

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Year A						Year B				
	Autumn Weeks 1-3 Visual Art focus	Autumn 1 & 2 STEM focus	Spring 1 & 2 History/ Geography Foci	Summer 1 Geography focus	Summer 2 Performing Arts focus	Autumn W 1-3 Visual Art focus	Autumn 1 & 2 History Focus	Spring 1 & 2 STEM focus	Summer 1 Geography focus	Summer 2 Performing Arts focus
	We Are Artists	Windows, Door & Mirrors (aka Magical Marvellous Makery)	Far, Far, Away (Ingenious Inventions?)	Crest of a Wave	Crest of a Wave Carnival Or Performance	We Are Artists	Terrific Time Travellers	Tales & Teeth	River Deep, Mountain High	River Deep, Mountain High Festival or Performance
Y4		<p>Y4 States of matter Compare and group materials Solids, Liquids and Gases Changes of state Measure temperature Evaporation and condensation</p> <p>Observe a puddle over time, snow melting etc How to dry a paper towel Windy Towers</p> <p>Vocab; solid, liquid, gas, solidify, water, thermometer, freeze, melt, evaporate, condense, condensation, heat, cool, degrees celcius, water cycle, melting, warm, cool, water vapour</p>	<p>Electricity Y4 – electricity What appliances run on electric? Create series circuit and name parts Identify if a lamp will light. Switches Conductors and insulators</p> <p>Vocab - Electricity, electrical circuit, cell, bulb, switch, wire, buzzer, danger, safety, conductor, insulator, open, closed,</p> <p>Observe what happens when you change things in a circuit What can you close a circuit with?</p> <p>Sound Y4</p>	<p>4- Living things and habitats Living things can be grouped Classification keys Environments can change Change over time Environment, flowering, plant, animal, vertebrate, invertebrate, amphibian, food wen, carnivore, omnivore, reptile, organism, nutrition, excretion, consumer, food source, predator, prey, respiration, growth, sensitivity, habitat</p> <p>Y4 Animals and humans. -digestion teeth food chains Predators/prey</p>			<p>Y4 States of matter Compare and group materials Solids, Liquids and Gases Changes of state Measure temperature Evaporation and condensation</p> <p>Vocab; solid, liquid, gas, solidify, water, thermometer, freeze, melt, evaporate, condense, condensation, heat, cool, degrees celcius, water cycle, melting, warm, cool, water vapour</p> <p>Observe a puddle over time, snow melting etc How to dry a paper towel Windy Towers</p>	<p>Y4 Animals and humans. -digestion teeth food chains Predators/prey Compare carnivore/herbivore teeth and draw conclusions What damages teeth</p> <p>Vocab: digestion, mouth, tongue, saliva, oesophagus, transport, stomach, enzymes, acid, teeth, incisors, canines, molars, pre-molars, hygiene, floss, brush, grinding, chewing, ripping, intestines, absorption, prey, predator, carnivore, herbivore, omnivore.</p> <p>Electricity Y4 – electricity What appliances run on electric?</p>	<p>4- Living things and habitats Living things can be grouped Classification keys Environments can change Change over time Environment, flowering, plant, animal, vertebrate, invertebrate, amphibian, food wen, carnivore, omnivore, reptile, organism, nutrition, excretion, consumer, food source, predator, prey, respiration, growth,</p>	

			<p>How are sounds made? Vibrations Link pitch and objects Distance makes sounds fainter <b>Make careful observations</b> <b>Find patterns in sounds made by different objects</b></p> <p>Vocab; vibrate, vibration, sound, pitch, volume, louder, quieter, faint, hear, ear, medium, pitch, woodwind, brass, insulate, percussion</p>	<p>Compare carnivore/herbivore teeth and draw conclusions What damages teeth</p> <p>Vocab: digestion, mouth, tongue, saliva, oesophagus, transport, stomach, enzymes, acid, teeth, incisors, canines, molars, pre-molars, hygiene, floss, brush, grinding, chewing, ripping, intestines, absorption, prey, predator, carnivore, herbivore, omnivore.</p>				<p>Create series circuit and name parts Identify if a lamp will light. Switches Conductors and insulators</p> <p>Vocab - Electricity, electrical circuit, cell, bulb, switch, wire, buzzer, danger, safety, conductor, insulator, open, closed,</p>	<p>sensitivity, habitat</p> <p>Sound Y4 How are sounds made? Vibrations Link pitch and objects Distance makes sounds fainter <b>Make careful observations</b> <b>Find patterns in sounds made by different objects</b> Vocab; vibrate, vibration, sound, pitch, volume, louder, quieter, faint, hear, ear, medium, pitch, woodwind, brass, insulate, percussion</p>	
Y3		<p>Y3- Forces and Magnets Compare movement Attraction and repel Compare and group Magnetic poles</p> <p><b>Set up practical enquiries and fair tests</b> <b>Make careful observations and measurements inc thermometers</b> <b>Use results to draw conclusions and make predictions</b> Car ramp Snowball catapult.</p>	<p>Rocks Compare and group rocks Fossils - how formed Soils - rocks and organic matter Vocab: Rock, mineral, fossil, igneous, metamorphic, sedimentary, sediment, magma, lava, permeable, impermeable</p> <p>Report on findings Change over time Group and classify Set up practical enquiries and fair tests</p>	<p>Y3Animals and nutrition Nutrition from food Skeleton and muscles for support, protection and movement Eg group with/without skeletons Plan meal plans <b>Make careful observations and measurements inc thermometers</b> <b>Identify differences, similarities and changes</b> <b>Key vocab: Nutrition, vitamins, minerals, fat, protein, carbohydrates, water, skeleton, support, brain, ribs,</b></p>	<p>Plants - functions and parts Requirements for growth Investigate water transport in plants eg carnations in dyed water Explore role of flowers <b>Identify differences, similarities and changes</b> <b>Use results to draw conclusions and</b></p>		<p>Rocks Y3Compare and group rocks Y3-Fossils - how formed Y3-Soils - rocks and organic matter Vocab: Rock, mineral, fossil, igneous, metamorphic, sedimentary, sediment, magma, lava, permeable, impermeable</p> <p>Y3- Forces Compare movement</p> <p><b>Report on findings</b> <b>Change over time</b></p>	<p>Y3 Y3- Forces and Magnets Compare movement Attraction and repel Compare and group Magnetic poles</p> <p><u>Key Vocab:</u></p> <p>Force , push, pull, open, surface, magnet, magnetic, attract, repel, magnetic poles, North, South</p> <p>Animals and nutrition</p>	<p><b>Use keys to explore plants and animals</b></p> <p>Y3Plants - functions and parts Y3 Requirements for growth Y3 Investigate water transport in plants eg carnations in dyed water Explore role of flowers <b>Identify differences,</b></p>	

		<p>Eg how far do things move on different surfaces? Uses for magnets?</p> <p><u>Key Vocab:</u></p> <p>Force , push, pull, open, surface, magnet, magnetic, attract, repel, magnetic poles, North, South</p>	<p>Y3 – light Dark is absence of light Light reflects Sunlight is dangerous Shadows when opaque blocks light Patterns in shadows changes Vocab; day, night, light, dark, reflect, reflection, shadow, opaque, translucent, light source, block</p> <p>Use results to draw conclusions</p> <p>Set up simple practical enquiries</p>	<p><b>heart, lungs, intestines, stomach, teeth, support, protect, movement, muscle, joint, diet</b></p>	<p>make predictions</p> <p>Vocabulary: plant, tree, leaf, stem, root, trunk, growth, sunlight, water, seed, bulb, flower, blossom, petal, nectar, transportation, pollination, seed dispersal, air, light, water, nutrients</p> <p>Skills and STEM investigations Sound Ask q's and use different scientific enquiries to solve them and support findings</p>		<p>Group and classify Set up practical enquiries and fair tests</p> <p>Y3 – light Dark is absence of light Light reflects Sunlight is dangerous Shadows when opaque blocks light Patterns in shadows changes Vocab; day, night, light, dark, reflect, reflection, shadow, opaque, translucent, light source, block</p> <p>Use results to draw conclusions</p> <p>Set up simple practical enquiries</p>	<p>Nutrition from food Skeleton and muscles for support, protection and movement Eg group with/without skeletons Plan meal plans Make careful observations and measurements inc thermometers Identify differences, similarities and changes</p> <p><b>Key vocab: Nutrition, vitamins, minerals, fat, protein, carbohydrates, water, skeleton, support, brain, ribs, heart, lungs, intestines, stomach, teeth, support, protect, movement, muscle, joint, diet</b></p>	<p>similarities and changes Use results to draw conclusions and make predictions</p> <p>Vocabulary: plant, tree, leaf, stem, root, trunk, growth, sunlight, water, seed, bulb, flower, blossom, petal, flower, nectar, transportation, pollination, seed dispersal, air, light, water, nutrients</p>	
Y2		<p>Y2 - Everyday materials Identify and compare suitability of materials. Change shape by squashing, bending and twisting. Simple tests to explore questions eg best material for an umbrella? Identify and classify</p> <p>Wood, metal, plastic, glass, rock, leather, hard, soft, smooth, squas, bend, glass, stretch, twist, rough</p>	<p>Y2 Animals including humans -offspring needs for survival exercise, diet and hygiene Perform simple tests and record data (heart rate) compare and contrast animal photos group animals (sort and classify) Vocab: offspring, adults, grow, water, food, diet, air, exercise, hygiene, nutrition, baby, toddler, child, teenager, adult, reproduce, eggs, chicks, chicken</p>	<p>Y2- Living things and habitats Alive, dead, never alive Habitats Link plants/animals to habitats Food chains Sort and classify and record in a chart. Explore questions eg is a flame alive? Construct simple food chains.</p> <p>Y2 Identify the basic structure of common flowering plants what do plants need to grow? Grow bulbs Observe closely</p>			<p>This year Y1 - Plant growth (this year to cover growth) Evergreen and deciduous Gathering data</p> <p>Growing hyacinth bulbs</p> <p>Y2 - Everyday materials Identify and compare suitability of materials. Change shape by squashing, bending and twisting. Simple tests to explore questions eg best material for an umbrella? Identify and classify</p>	<p>Y2 Animals including humans -offspring needs for survival exercise, diet and hygiene Perform simple tests and record data (heart rate) compare and contrast animal photos group animals (sort and classify) Vocab: offspring, adults, grow, water, food, diet, air, exercise, hygiene, nutrition, baby, toddler, child, teenager, adult, reproduce, eggs, chicks, chicken</p>	<p>Y2- Living things and habitats Alive, dead, never alive Habitats Link plants/animals to habitats Food chains Sort and classify and record in a chart. Explore questions eg is a flame alive? Construct simple food chains. Y2 Identify the basic structure of common flowering plants</p>	

			Skills and STEM investigations Ask simple questions and answer them in different ways  Use observations and ideas to answer questions	Gather and record data – bean diary Vocab; Deciduous, evergreen, leaf, trunk, garden plant, wild plant, fruit, vegetable, bulb, flower, stem, roots, sunlight, water, seed, temperature			Use of everyday materials – link to sewing Wood, metal, plastic, glass, rock, leather, hard, soft, smooth, squas, bend, glass, stretch, twist, rough		what do plants need to grow? Grow bulbs Observe closely Gather and record data – bean diary  Vocab; Deciduous, evergreen, leaf, trunk, garden plant, wild plant, fruit, vegetable, bulb, flower, stem, roots, sunlight, water, seed, temperature	
Y1		Materials and their uses distinguish between an object and the material from which it is made identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses 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  Vocab: wood, plastic, glass, metal, rock, water, hard, soft, stiff, rough,	<b>Which material will make the best kite?</b> observe closely, using simple equipment perform simple tests identify and classify use our observations and ideas to suggest answers to questions gather and record data to help in answering questions  <b>We learn about animals including humans and we can</b> identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals identify and name a variety of common	ask simple questions and recognise that they can be answered in different ways <b>STEAM: How can we make a rocket? Will the angle we launch our rocket at change how far it will fly?</b> observe closely, using simple equipment perform simple tests identify and classify use our observations and ideas to suggest answers to questions gather and record data to help in answering questions.  Plants identify and name a variety of common wild and garden plants, including deciduous and evergreen trees	<b>identify and name variety of common wild and garden plants, including deciduous and evergreen trees</b>  <b>identify and describe the basic structure of a variety of common flowering plants, including trees</b>  We will name a variety of common wild and garden plants by observing closely and comparing and contracting plants we find on our plant walk in our locality. We will		<b>Seasonal Change</b> · observe changes across the 4 seasons · observe and describe weather associated with the seasons and how day length varies Vocab; spring, summer, autumn, winter, day, night, daytime, rain, wind, snow, sleet, hail, fog, warm, cold  <b>Everyday Materials</b> · distinguish between an object and the material from which it is made · identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock · 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 We will go on a materials walk, collect and sort objects by their materials, discuss the materials and	<b>We learn about animals including humans and we can</b> identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals identify and name a variety of common animals that are carnivores, herbivores and omnivores describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. <b>We will discover how animals are grouped and describe them using scientific words. We will use our knowledge to create a zookeepers handbook. (Drama into writing)</b> <b>We will work towards our RSPB Wild Award ( Bird watch, make and observe</b>	We learn about Plants and we can... identify and name a variety of common wild and garden plants, including deciduous and evergreen trees identify and describe the basic structure of a variety of common flowering plants, including trees. Sunflowers observe and describe how seeds and bulbs grow into mature plants Grow beans in jars & keep a diary. Grow sunflowers. find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. Grow seeds in different	

		smooth, shiny, dull, waterproof, absorbant, brick, paper, fabric, elastic, foil	animals that are carnivores, herbivores and omnivores describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. Vocab: Fish, reptiles, mammals, carnivore, herbivore, omnivore, insect, minibeast, fish, bones, skeleton, bird, <b>Seasonal Change</b> <i>observe changes across the 4 seasons</i> · <i>observe and describe weather associated with the seasons and how day length varies</i> Vocab; spring, summer, autumn, winter, day, night, daytime, rain, wind, snow, sleet, hail, fog, warm, cold	identify and describe the basic structure of a variety of common flowering plants, including trees	sketch what we find and record thoughts on post its. We will <b>discover</b> the basic structure of a flowering plant and a tree. We will name the different parts and describe what they are for. We will look at the bobac tree from The Gambia. We will group and classify seeds and compare and contrast. We will plant runner beans or sunflowers and record what happens to them. We will record their height in a chart/table. We will <b>explore</b> how we can take care of plants and flowers in the wild and those which we grow. We will <b>explore</b> the conditions needed for a plant/seed to grow.  <i>observe changes across the 4 seasons</i> <i>observe and describe weather associated with the seasons and how day length varies</i>		<i>make faces in the style of Arcimboldo.</i> <i>Linked to The Great Fire of London we will explore the properties of a bucket &amp; discover the best material for a bucket today. We will record our results in a chart.</i>  Vocab: wood, plastic, glass, metal, rock, water, hard, soft, stiff, rough, smooth, shiny, dull, waterproof, absorbent, brick, paper, fabric, elastic, foil  Evergreen and deciduous Growing hyacinth bulbs	<b>a hog house, make bird feeders,.)</b> Vocab: Fish, reptiles, mammals, carnivore, herbivore, omnivore, insect, minibeast, fish, bones, skeleton, bird, Senses, touch, taste, smell, sight, hearing, <b>Seasonal Change</b> · <i>observe changes across the 4 seasons</i> · <i>observe and describe weather associated with the seasons and how day length varies</i> Vocab; spring, summer, autumn, winter, day, night, daytime, rain, wind, snow, sleet, hail, fog, warm, cold  Name animals: Carnivore, herbivore, omnivore Structure of animals Parts of a human body	places, where do they grow best? (STEM website, Darwin's thinking walk, spot the plant, help.)  Seasonal Change · <i>observe changes across the 4 seasons</i> · <i>observe and describe weather associated with the seasons and how day length varies</i>  STEAM: How will Jack escape from the beanstalk? Create a parachute for Jack to use. Think about the best materials and the size for the best escape. Vocab; leaves, flowers, deciduous, evergreen (blossom), petals, fruit, roots, bulb, seed, trunk, branches, stem	
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				Skills and STEM investigations										
YR		Making observations and asking questions about the familiar, the place we live and the natural world Identify everyday materials e.g glass, brick, rock, paper, plastic, metal, clay and cardboard for particular uses Talking about things we have observed inc. plants, animals, natural and found objects compare and group together a variety of everyday materials on the basis of their simple physical properties Talk about why things happen and how things work Developing an understanding of growth, decay and changes over time Show care and concern for living things and the environment	Ask simple questions and recognize that they can be answered in different ways <b><u>Which paper will make the best aeroplane?</u></b> observe closely, using simple equipment perform simple tests identify and classify use our observations and ideas to suggest answers to questions Investigating paper airplanes	observing closely, performing simple tests identify and classify, know similarities and differences in objects, materials and living things use our observations and ideas to suggest answers to questions observe changes across the four seasons Name plants and trees, identify their leaves and seeds, make wild garlic pesto Un-nature trail- looking after the environment Lifecycle of caterpillar to butterfly, tadpole to frog Plant sunflower and bean seeds, lifecycle of a bean How is paper made? Are all papers strong? In Science we will <b>discover</b> which materials/objects float and sink. We will use our findings to design & <b>create</b> a boat that floats. Can the boat carry a load? How many pennies?			Making observations and asking questions about the familiar, the place we live and the natural world and ourselves; Identify everyday materials e.g glass, brick, rock, paper, plastic, metal, clay and cardboard for particular uses. Talking about things we have observed inc. plants, animals, natural and found objects-changing of the seasons, Autumn, Winter, hibernating animals, leaf changes compare and group together a variety of everyday materials on the basis of their simple physical properties-what are things made of? Look at collection of metal kitchen equipment/household objects-are they magnetic?	What's the difference between a wolf and a dog? What can we learn from animal teeth and bones? What do wolves eat? What is their habitat? What about bears? Do they live in the UK? Polar bears? What do our teeth do? How can we look after our teeth? Investigate different materials, which material is best to build a house from? identify and classify- which animals have babies? Which animals lay eggs?	observing closely,- make observations of plants, plant seeds and beans performing simple tests- floating and sinking identify and classify, know similarities and differences in objects, materials and living things observe changes across the four seasons Name plants and trees, identify their leaves and seeds Lifecycle of caterpillar to butterfly, tadpole to frog Plant sunflower and bean seeds, lifecycle of a bean We will <b>discover</b> which materials/objects float and sink. We will use our findings to design & <b>create</b> a boat that floats. Can the boat carry a load? How many pennies?					
Values	Friendship	Friendship	Respect	Hope	Forgiveness	Perseverance	Generosity	Friendship	Friendship	Respect	Hope	Forgiveness	Perseverance	Generosity