



# Science



## Whole School Overview

Science Overview			
	Autumn	Spring	Summer
<b>Nursery 2-3 Topic</b>	<b>My Day Autumn 1</b> <b>What's in the garden? Autumn 2</b>	<b>Our Pets Spring 1</b> <b>Farm Animals Spring 2</b>	<b>Making Music Summer 1</b> <b>Musical Stories Summer 2</b>
<b>Term and Focus</b>	Autumn To explore texture and materials	Spring To name a variety of different animals.	Summer To explore how instruments make different sounds.
<b>Prior Learning</b>	New Learning	Nursery 2-3 Autumn Children will explore different animals that live in the garden	New Learning
<b>Future Learning</b>	Nursery 3-4 Autumn Children will be labelling objects due to their texture.	Nursery 3-4 Spring Children will learn to label a variety of different animals	Nursery 3-4 Summer Children will be developing this descriptive language through exploring different materials.
<b>Nursery 3-4 Topic</b>	<b>Marvellous Me Autumn 1 – What's on Wood Street? Autumn 2</b>	<b>People Who Help Us Spring 1 – Our Garden Spring 2</b>	<b>Little Explorers Summer 1 – Let's Pretend Summer 2</b>
<b>Term and Focus</b>	Autumn To name and label rough and smooth objects.	Spring Growth (Plants) – naming parts of a plant and exploring planting.	Summer Talk about the differences between materials and the changes they notice.

<b><u>Prior Learning</u></b>	Nursery 2-3 Spring Exploring textures and materials		Nursery 2-3 Autumn Labelling materials		Nursery 3-4 Spring Observing changes	
<b><u>Future Learning</u></b>	Nursery 3-4 Spring labelling objects		Year R – Spring 2 Children will explore what plants can grow in which climates when learning about the seasons.		Year R - Summer Observing and commenting on changes they witness in different environments.	
<b>Year R Topic</b>	<b>We are Superheroes Autumn 1</b> <b>Celebrations Autumn 2</b>		<b>Wonderful Walthamstow Spring 1</b> <b>Little Investigators! Spring 2</b>		<b>Traditional Tales Summer 1</b> <b>Modern Tales Summer 2</b>	
<b><u>Term and Focus</u></b>	Autumn Cooking – Investigating states and healthy eating/ healthy teeth		Spring Children learn about the natural world around them (seasons).		Summer Recognise that some environments are different from the ones in which they live.  Describe what they hear, see and feel whilst outside.	
<b><u>Prior Learning</u></b>	Nursery 3-4 Spring Children will have explored cooking and self-regulation/care.		Nursery 3-4 Summer Children will have looked at what plants need to grow.		Year R Spring Children will have practised observing and commenting on different environments due to describing seasons.	
<b><u>Future Learning</u></b>	Year 1 - Spring Animals and humans- identify & observe		Year 1 – Autumn Seasons Earth and Space- Seasonal changes		Year 1 - Autumn Seasons Earth and Space- Seasonal changes	
<b>Year 1</b>						
<b><u>Term and Focus</u></b>	Materials- properties and classifying	Seasons* Earth and Space- Seasonal changes	Animals and humans- types of animals, body parts, diet & lifestyle	Living Things – living/non-living, habitats, draw food chain	Evolution & Inheritance – family resemblance parents & children	Light & seeing – light sources, light travels in straight lines

					<p>Movement, forces &amp; magnets – pushes and pulls, describing movement</p> <p>Plants- naming plants &amp; structure</p>	<p>Sound &amp; Hearing – sound sources, recognising sounds</p>
<b><u>Prior Learning</u></b>	Year R – Summer	Year R – Summer	Year R Autumn 1	Year R Summer – different environments, Autumn – healthy diet	<p>Evolution &amp; Inheritance – new learning</p> <p>Movement force &amp; magnets – new learning</p> <p>Plants - Reception Spring – natural world</p>	Nursery 2-3 – Summer – exploring instruments
<b><u>Future Learning</u></b>	Year 2 Spring 1- suitability of materials	Year 2 Spring 2 – Earth & Space (Seasonal changes, day length, shadows)	Year 2 Autumn - offspring to adults & exercise	Year 2 – Summer - Living Things (compare living/non-living, compare food chains, design habitats)	<p>Evolution &amp; Inheritance – Year 2 Autumn 2 (family resemblance)</p> <p>Movement force &amp; magnets – Year 2 Spring 2 (comparing movement)</p> <p>Plants – Year 2 Summer 1 (conditions for growth,</p>	<p>Year 2 - Autumn – Light &amp; Seeing (experiment with blocking light)</p> <p>Year 2 – Autumn – Sound &amp; Hearing (experiment with blocking sounds, comparing/categorising sound)</p>

					comparing plants, deciduous/evergreen trees)	
<b>Year 2</b>						
<b><u>Term and Focus</u></b>	<p>Sound &amp; Hearing (experiment with blocking sounds, comparing/categorising sound)</p> <p>Light &amp; Seeing (experiment with blocking light)</p> <p>Evolution &amp; Inheritance (family resemblance)</p>	Animals and Humans- Comparing animals, diet and exercise	Materials- suitability of materials	<p>Earth &amp; Space (Seasonal changes, day length, shadows)</p> <p>Movement force &amp; magnets (comparing movement)</p>	Plants (conditions for growth, comparing plants, deciduous/evergreen trees)	Living Things (compare living/non-living, compare food chains, design habitats)
<b><u>Prior Learning</u></b>	<p>Y1 Light &amp; Seeing – light sources, light travels in straight lines</p> <p>Y1 Sound &amp; Hearing – sound sources, recognising sounds</p> <p>Y1 Evolution &amp; Inheritance (family resemblance, parents &amp; children)</p>	Y1 Spring 1 - Animals and humans- types of animals, body parts, diet & lifestyle	Year 1 Autumn- properties and classifying	Y1 Autumn 2 - Seasons*  Earth and Space- Seasonal changes	Year 1 Summer- naming plants & structure	Y1 Spring - Living Things – living/non-living, habitats, draw food chain
<b><u>Future Learning</u></b>	Year 3 Summer - Light & Seeing- properties of light, shadows, darkness	Year 3 Autumn – Animals & Humans (nutrition, digestive system,	Year 3 Summer – Materials (changes of state, rocks)	Y3 Light & Sound – shadows	Year 3- Autumn- nutrition, transport, pollination and dispersal	Year 3 Spring – Living Things – contrasting

	<p>Year 3 Summer - Sound &amp; Hearing – how sound travels</p> <p>Year 3 Summer - Materials – formation of fossils (links to evolution &amp; inheritance)</p> <p>Year 5 Autumn 2 – Evolution &amp; Inheritance (Fossils, living things and their offspring, evolution)</p>	muscular & skeletal)		<p>Y5 Earth &amp; Space – solar system</p> <p>Y3 Movement, forces &amp; magnets (friction, magnetism)</p>		habitats, classification keys
<b>Year 3</b>						
<b><u>Term and Focus</u></b>	Materials - Rocks and Fossils, states of matter	Animals & Humans (nutrition, digestive system, muscular & skeletal, food chains)	Electrical Circuits - (sources, series circuits)	<p>Movement, forces &amp; magnets (friction, magnetism)</p> <p>Living Things – contrasting habitats, classification keys</p>	Plants- nutrition, water transport, pollination and dispersal	<p>Light &amp; Seeing- properties of light, shadows, darkness</p> <p>Sound &amp; Hearing – how sound travels</p>
<b><u>Prior Learning</u></b>	Year 2 Spring – properties of materials including rocks	Year 2 Autumn 1- Animals and Humans- Comparing animals, diet and exercise	New learning	Y2 Spring - Movement force & magnets (comparing movement)	Year 2 Summer - Plants (conditions for growth, comparing plants, deciduous/evergreen trees)	Year 2 – Spring – Earth & Space – position of sun

		Y2 – Summer – Living Things – food chains		Y2 Summer - Living Things (compare living/non-living, compare food chains, design habitats)		Year 2 – Autumn – Light & Seeing – blocking light sources  Year 2 – Autumn - Sound & Hearing (experiment with blocking sounds, comparing/categorising sound)
<b><u>Future Learning</u></b>	Year 4 – Materials – rocks and fossils, states of matter	Year 4 Summer 2- Animals & Humans (nutrition, digestive system, muscular & skeletal, food chains)	Year 4 Spring 1 – Electrical Circuits - (Series circuits, switches, conductors/insulators)	Year 4 – Summer 1 – Movement forces & magnets (movement on different surfaces, friction, magnetism)  Y4 – Summer - Living things- grouping living things, habitats, changing environments	Year 4 Summer 2 – Plants (conditions for growth, pollination, water transportation)	Year 4 – Light and Seeing – reflections and shadows  Year 4 – Sound and Hearing – experiment with vibrations to produce sounds
<b>Year 4</b>						
<b><u>Term and Focus</u></b>	Materials – rocks and fossils, states of matter	Movement, Forces and Magnets – (movement on different surfaces, friction, magnetism)  Living things- grouping living things, habitats,	Electrical Circuits - (Series circuits, switches, conductors/insulators)	Sound and Hearing – experiment with vibrations to produce sounds  Light and Seeing –	Plants (conditions for growth, pollination, water transportation)	Animals and Humans- (nutrition, muscles, skeleton, digestive system, teeth)

		changing environments		reflections and shadows		
<b><u>Prior Learning</u></b>	Y3 Spring - Materials - Rocks and Fossils, states of matter	Year 3 – Spring 2 - Movement, forces & magnets (friction, magnetism)  Year 3 – Spring 2 – Living Things – contrasting habitats, classification keys	Y3 – Spring - Electrical Circuits - (sources, series circuits)	Y3 – Summer - Sound & Hearing – how sound travels  Y3 – Summer - Light & Seeing- properties of light, shadows, darkness	Y3 – Autumn - Plants- nutrition, water transport, pollination and dispersal	Year 3 Autumn 2- Animals & Humans (nutrition, digestive system, muscular & skeletal, food chains)
<b><u>Future Learning</u></b>	Year 5 Autumn 2 – Materials – solubility, reversible/irreversible changes	Year 5 Autumn 1 – Movement, Forces and Magnets (Drag forces, levers, pulleys and gears)  Year 5 Spring 1 – Living Things (Classification Keys, Life cycles, reproduction in animals and plants)	Y5 – Summer – Electrical Circuits – (circuit symbols, experiment with different combinations of components)	Y5 – Sound & Hearing – pitch, volume, how sound diminishes as it travels  Y5 – Light & Seeing – how light travels, how we see	Y5 – Spring – Living Things – reproduction in plants	Year 5 Spring 2- Animals & Humans (changes as we age, circulatory system, healthy lifestyle)
<b>Year 5</b>						
<b><u>Term and Focus</u></b>	Movement, Forces and Magnets (Drag forces, levers, pulleys and gears)	Materials – solubility, reversible/irreversible changes	Living Things (Classification Keys, Life cycles, reproduction in animals and plants)	Animals & Humans (changes as we age, circulatory system, healthy lifestyle)	Earth and Space- planets and solar system  Electrical Circuits (Using electrical symbols,	Sound & Hearing (characteristics of objects that produce sounds, how sound changes as it travels)

			Evolution and Inheritance (Fossils, living things and their offspring, evolution)		observing effect of changing components in a circuit)	Light & Seeing (how light travels, how we see, how shadows are formed)
<b>Prior Learning</b>	Year 4 – Summer 1 - Movement, Forces and Magnets – (movement on different surfaces, friction, magnetism)	Year 4 – Autumn 1 - Materials – rocks and fossils, states of matter	Year 4 Summer 1 – Living Things (grouping living things, habitats, changing environments)  Year 4 Autumn 1- Materials (Formation of fossils)  Year 2 Autumn 2 – Evolution & Inheritance (Family resemblance)	Year 4 Summer 2- Animals and Humans- (nutrition, muscles, skeleton, digestive system, teeth)	Year 4 – Light and Seeing (links to Earth & Space) – observing shadows  Year 2 – Earth & Space (seasons)  Year 4 – Electrical Circuits (Series circuits, switches, conductors/insulators)	Year 4 – Spring 2 - Sound and Hearing – experiment with vibrations to produce sounds  Year 4 – Spring 2 – Light and Seeing (reflections and shadows)
<b>Future Learning</b>	Year 6 Spring 1 - Movement, Forces and Magnets (Drag forces, levers, pulleys and gears)	Year 6 Autumn 2 - Materials – separating solutions, investigating evaporation and condensation, reversible/irreversible changes	Year 6 – Summer 1 - Living Things (Classification Keys, Life cycles, reproduction in animals and plants)  Year 6 – Spring 1 - Evolution and Inheritance (categorising fossils, categorise differences between living things and	Year 6 Spring - Animals & Humans (investigate changes as we age, human heart, veins, arteries, capillaries, healthy lifestyle)	Year 6 – Summer – Earth & Space (earth & moon’s movement, tides, spherical bodies)  Year 6 – Summer – Electrical Circuits (voltage, resistance, electrical symbols, comparing circuits)	Year 6 – Autumn 1 – Light & Seeing (how light travels, periscopes, reflection & refraction)  Year 6 – Autumn – Sound and Hearing (what affects the volume of sound)

			offspring, evolution and adaptation)			
<b>Year 6</b>						
<b><u>Term and Focus</u></b>	<p>Light &amp; Seeing (how light travels, periscopes, reflection &amp; refraction)</p> <p>Sound and Hearing (what affects the volume of sound)</p>	<p>Materials – separating solutions, investigating evaporation and condensation, reversible/irreversible changes</p>	<p>Movement, Forces and Magnets (Drag forces, levers, pulleys and gears)</p> <p>Evolution and Inheritance (categorising fossils, categorise differences between living things and offspring, evolution and adaptation)</p>	<p>Animals &amp; Humans (investigate changes as we age, human heart, veins, arteries, capillaries, healthy lifestyle)</p>	<p>Living Things (How and why scientists Classify living things, Life cycles, reproduction in animals and plants)</p>	<p>Earth &amp; Space (earth &amp; moon’s movement, tides, spherical bodies)</p> <p>Electrical Circuits (voltage, resistance, electrical symbols, comparing circuits)</p>
<b><u>Prior Learning</u></b>	<p>Year 5 – Summer - Light &amp; Seeing (how light travels, how we see, how shadows are formed)</p> <p>Year 5 – Summer - Sound &amp; Hearing (characteristics of objects that produce sounds, how sound changes as it travels)</p>	<p>Year 5 – Autumn 2 - Materials – solubility, reversible/irreversible changes</p>	<p>Year 5 – Autumn 1 - Movement, Forces and Magnets (Drag forces, levers, pulleys and gears)</p> <p>Year 5 – Spring 2 - Evolution and Inheritance (Fossils, living things and their offspring, evolution)</p>	<p>Year 5 – Spring 2 - Animals &amp; Humans (changes as we age, circulatory system, healthy lifestyle)</p>	<p>Year 5 - Spring 1 - Living Things (Classification Keys, Life cycles, reproduction in animals and plants)</p>	<p>Year 5 – Summer 1 - Earth and Space- planets and solar system</p> <p>Year 5 – Summer 1 - Electrical Circuits (Using electrical symbols, observing effect of changing components in a circuit)</p>
<b><u>Future Learning</u></b>	KS3	KS3	KS3	KS3	KS3	KS3

