

























Science Overview- Progression of curriculum and enquiry skills										
	Working scientifically progression from EYFS to KS1.									
	Plan	Do	Record	Review						
Reception	Choose the resources they need for their chosen activities and say when they do or don't need help.	Know about similarities and differences in relation to places, objects, materials and living things. Make observations of animals and plants. Explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Select and use technology for particular purposes.	Represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories.	Talk about the features of their own immediate environment and how environments might vary from one another. Explain why some things occur and talk about changes.						
KS1	Ask simple questions and recognising that they can be answered in different ways.	Observe closely, using simple equipment. Perform simple tests. Identify and classify.	Gather and record data to help in answering questions.	Use their observations and ideas to suggest answers to questions.						
<p>In order to ensure complete coverage of the working scientifically skills and that children gain experience in all five types of scientific enquiry, there is a big question suggested for each topic. In each big question there are progressive activities they need to do to find out the overall question. Teachers are able to adapt these to suit their class, as long as the same enquiry coverage is achieved. In addition, there is a task linked to a famous scientist for each year group. Links to scientists are identified in yellow.</p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td> <p>Asking questions</p>  <p>R, PS</p> </td> <td> <p>Making predictions</p>  <p>CT, OT</p> </td> <td> <p>Setting up tests</p>  <p>CT, PS</p> </td> <td> <p>Observing and measuring</p>  <p>OT, PS</p> </td> <td> <p>Recording data</p>  <p>IGC, R</p> </td> <td> <p>Interpreting and communicating results</p>  <p>CT, PT, IGC, OT</p> </td> </tr> </table> <p>There are six enquiry types that are covered in KS1. These are covered as part of the science content coverage. Use of the big questions should ensure full coverage of these skills. It is not expected that every type will be covered in every enquiry. Instead, teachers should choose a focus skill they wish to assess within that enquiry. These should be identified in the planning.</p>					<p>Asking questions</p>  <p>R, PS</p>	<p>Making predictions</p>  <p>CT, OT</p>	<p>Setting up tests</p>  <p>CT, PS</p>	<p>Observing and measuring</p>  <p>OT, PS</p>	<p>Recording data</p>  <p>IGC, R</p>	<p>Interpreting and communicating results</p>  <p>CT, PT, IGC, OT</p>
<p>Asking questions</p>  <p>R, PS</p>	<p>Making predictions</p>  <p>CT, OT</p>	<p>Setting up tests</p>  <p>CT, PS</p>	<p>Observing and measuring</p>  <p>OT, PS</p>	<p>Recording data</p>  <p>IGC, R</p>	<p>Interpreting and communicating results</p>  <p>CT, PT, IGC, OT</p>					

Comparative and fair testing  (fair testing KS2 only) (CT)	Research  (R)	Observations over time  (OT)	Pattern seeking  (PS)	Identifying, grouping and classifying  (IGC)	Problem solving  (PSO) (An additional enquiry type, as suggested by the PSTT)
------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------

©Primary Science Teaching Trust 2019

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception Reception have a topic based approach within 'Understanding the World' incorporating geography, computing, RE and science skills within this. They still have a big question to answer to assess against the Early Learning Goals (ELG)	TOPIC: We are AMAZING Who are we? Looking at themselves and how they change. (OT)	TOPIC: SENSATIONAL SEASONS What colours do we see in our world? Looking at day and night, including seasons. (OT) (PS)	TOPIC: NURSERY RHYMES (linked to animals) How have animals changed? Looking at the topic dinosaurs. How to care for animals. (IGC)	TOPIC: DINOSAURS How can I use materials? Looking at different materials and how they are used. (IGC) (PSO) Mary Anning- palaeontologist.	TOPIC: BESIDE THE SEASIDE What can I do with water? Looking at how water moves and how it can be used. (PSO)	TOPIC: READY, STEADY GROW. How do plants grow? Observing plants and what they need to grow. (PS)
Vocab	Head, eyes, nose, mouth, ears, hands, fingers, feet, toes, arm Leg, smell, touch, hear, taste, see	Summer day Spring dark Autumn light Winter night Season Moon sun	Animal, bird, fish, whales, fur, tail, nose, eye, feet, paw, feathers, sizes, baby animal names, names of animals	Material, metal, Wood, rock, plastic, hard, Glass, soft, paper, fabric, Material, smooth, shiny rough	water, flow, see through, wet, fast, slow, hard, soft, frozen, ice, melt,	Tree, petals, trunk fruit, branch roots, leaves bulb, flowers seed, stem

<p>Suggested books</p>						
<p>Year 1</p>	<p>Animals including humans: How are Humans and animals different? (Human focus) (CT)</p> <p>George Edward Alcorn Jr. helped</p>	<p>Animals including humans: How are Humans and animals different? (Animal focus) (IGC)</p>	<p>Everyday materials: What are materials? (IGC) (CT)</p> <p>Mae C Jemison- 1st African American in space. (Year A)</p>	<p>Everyday materials: What are materials? (CT) (R)</p> <p>How to melt ice (PSO)</p>	<p>Seasonal Changes: How does weather affect us? (Spring/Summer) (OT)</p>	<p>Plants: What is in our local environment? (PS) (OT) (R) (IGC)</p>

	<p>invent parts for x-rays. (Year B)</p> <p>Seasonal Changes: How does weather affect us? (Autumn/winter) OT</p>					
Vocab	<p>Body, head, neck, arms, elbows, legs, knees, face, ears, eyes, eyebrows, eyelashes, nose, hair, mouth, teeth, tongue, feet, toes, fingers, nails, ankle, hips, waist, trunk, chest, shoulders, back, hands, wrist, tail, wing, claw, fin, scales, feathers, fur, beak, senses, hearing, seeing, touching,</p>	<p>Object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, cardboard, rubber, wool, clay, hard, soft, stretchy, stiff, bendy, waterproof, absorbent, tear, rough, smooth, shiny, dull, see through, not see through</p>	<p>Names of: wild plants, garden plants, flowering plants, trees, leaf, flower, blossom, petal, fruit, berry, root, bulb, seed, trunk, branch, stem, bark, stalk, vegetable</p> <p>Seasonal changes: Season, spring, summer, autumn, winter, weather, hot, warm, cool cold, sunny, cloudy, windy, rainy, snowing, hailing, sleet, frost, fog, mist, icy, rainbow, thunder, lightning, storm, light, dark, day, night</p>			

<p>Suggested books</p>						
<p>Year 2</p>	<p>Animals, including humans: Basic needs to survive, hygiene How do I lead a healthy lifestyle? (CT)</p> <p>Marie M. Daly and Dr. Quentin B. Deming- understanding of how foods and diet can affect the</p>	<p>Living things and their habitats: (lifecycles. Things that have been alive, dead, never alive) What's in your habitat? (R)</p> <p>(OT) (IGC)</p>	<p>Uses of everyday materials: How do I use materials? (R) (IGC) (OT) (CT)</p> <p>The best... (PSO)</p>	<p>Uses of everyday materials: How do I use materials? (CT) (IGC)</p> <p>Charles Mackintosh- inventor of waterproof materials.</p>	<p>Plants: What happens in a garden?</p> <p>How do seed mature into plants? (R)</p> <p>How do I keep plants alive? (OT)</p> <p>How do plants grow? (CT)</p>	

	<p>health of the heart.</p> <p>Animals, including humans: (exercise)</p> <p>How do I lead a healthy lifestyle?</p> <p>(R) (IGC)</p> <p>Fitness videos</p> <p>(PSO)</p>				
Vocab	<p>offspring, life cycles, grow, change, adults, basic needs water, food, air survival, exercise, food types (fruit and veg, bread, rice, pasta, milk, dairy, foods high in fat and sugar, meat, fish, eggs, beans), hygiene Living, dead, never been alive,</p> <p>names of local habitats, land, woodland, meadow, name micro habitats, under log, stony path, under bushes, suited, basic needs, depend, food, food chain, shelter</p>	<p>Suitable/unsuitable, use, object, material, property, wood, plastic, glass, metal water, rock, fabrics, hard, soft, stretchy, flexible, waterproof, absorbent, transparent, translucent, opaque, shape, change, twist, squash, bend, stretch, roll, squeeze</p>	<p>Recapping Year 1 vocab plus seeds, bulbs, water, light, growth, healthy, shoot, seedling,</p>		

Suggested books

