



Key stage 1 Science National Curriculum coverage

St Luke's CE Academy Endon

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Reception	Year 1	Year 2
<p>See below a list of objectives with matching science vocabulary which is taught throughout continuous provision over the course of reception. Objectives are broken down into science units similar to those of KS1.</p> <p><u>Objectives:</u> <u>Animals, excluding humans:</u> Recognise some environments that are different to the one in which they live <u>Vocabulary:</u> names of animals, live, on land, in water, jungle, desert, North Pole, South Pole, sea, hot, cold, wet, dry, snow, ice, environment, polar regions, ocean, camouflage</p> <p><u>Objectives:</u> <u>Humans:</u> Talk about members of their immediate family and community. Name and describe people who are familiar to them. <u>Vocabulary:</u> hair (black, brown, dark, light, blonde, ginger, grey, white, long, short, straight, curly), eyes (blue, brown, green, grey), skin (black, brown, white), big/tall, small/short, bigger/smaller, baby, toddler, child, adult, old person, old, young, brother, sister, mother, father, aunt, uncle,</p>	<p><u>What are the different parts of our body and how are they linked to our senses?</u> <u>How can we group and identify animals? (Biology)</u> Lesson 1: What are the different parts of our body? Objective: Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense Vocabulary: head, nose, ear, mouth, eyes, neck, shoulders, torso, arms, legs, bottom, feet, hands, fingers, toes, teeth</p> <p>Lesson 2: Are all of our bodies the same? Objective: Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense Vocabulary: size, length, width, colour, shape, head, nose, ear, mouth, eyes, neck, shoulders, torso, arms, legs, bottom, feet, hands, fingers, toes</p> <p>Lesson 3: What are our 5 senses and what parts of our body do these link to? Objective: Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense Vocabulary: eyes (sight/see/vision/look), nose (smell/scent/sniff), tongue (taste), fingers/hands/skin (touch/feel), ears (hear/sound/listen), senses</p>	<p><u>What are living things, and do they all have the same habitats and needs? (Biology) SPLIT OVER 2 HALF TERMS</u> Lesson 1: Are all things living? Objective: Explore and compare the differences between things that are living, dead, and things that have never been alive Vocabulary: living, dead, never lived, differences, basic needs, move, feed</p> <p>Lesson 2: Do all living things have the same habitats? Objective: Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other Identify and name a variety of plants and animals in their habitats, including micro-habitats Vocabulary: habitats, suites, basic needs, food, names of local habitats (pond, lake, canal, woodland, field, etc), micro-habitats (under logs, in bushes etc)</p> <p>Lesson 3: What living things suit which habitats? Objective: Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other Identify and name a variety of plants and animals in their habitats, including micro-habitats (<i>Choice chamber act</i>)</p>



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<p>grandmother, grandfather, cousin, friend, family, boy, girl, man, woman, bald, elderly, wrinkles, male, female, freckles</p> <p><u>Objectives:</u> <u>Living things and their habitats:</u> Draw information from a simple map. Explore the natural world around them. Describe what they see, hear and feel whilst outside. Recognise some environments that are different to the one in which they live.</p> <p><u>Vocabulary:</u> plant, tree, bush, flower, vegetable, herb, weed, animal, names of plants and animals they see, name of a contrasting environment e.g. beach, forest, environment</p> <p><u>objectives:</u> <u>Seasonal changes:</u> Explore the natural world around them. Describe what they see, hear and feel whilst outside. Understand the effect of changing seasons on the natural world around them.</p> <p><u>Vocabulary:</u> spring, summer, autumn, winter, seasons, sunny, cloudy, hot, warm, cold, shower, raining, storm, thunder, lightning, hail, sleet, snow, icy, frost, puddles, windy, rainbow, animals, young, plants, flowers, hibernate, migrate, snowflake</p>	<p>Lesson 4: How can we sort animals? Objective: Identify and name a variety of common animals including fish, amphibians, reptiles, mammals and birds Vocabulary: broad groups fish, amphibians, reptiles, birds, mammals, habitats, size, colour</p> <p>Lesson 5: How can we compare animals? Objectives: Describe and compare the structure of a variety of common animals (birds, fish, amphibians, reptiles and mammals, including pets). Vocabulary: broad groups fish, amphibians, reptiles, birds, mammals, carnivores, herbivores, omnivores, diets, habitats, size, colour</p> <p>Lesson 6: How can we group animals based on their diets? Objective: Identify and name a variety of common animals that are carnivores, herbivores and omnivores. Vocabulary: carnivores, herbivores, omnivores, diets</p>	<p>Vocabulary: habitats, suites, basic needs, food, names of local habitats (pond, lake, canal, woodland, field, etc), micro-habitats (under logs, in bushed etc)</p> <p>Lesson 4: Identifying the needs of animals based on their characteristics Objective: Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other (<i>designing a new creature</i>) Vocabulary: Mixture of characteristics from animals such a fur, size, diet etc, habitats, suited</p> <p>Lesson 5: What are food chains and what do they represent? Objective: Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food Vocabulary: food chains, food, feed, food source</p> <p>Lesson 6: Exploring habitats- outside activities Objective: Recap of previously taught objective</p>
	<p><u>What is the difference between the 4 seasons?</u></p> <p>Lesson 1: What and when are the 4 seasons? Objective: Observe changes across the four seasons.</p>	<p><u>What are the different properties of materials and are they all suitable for everyday objects? (Chemistry) SPLT OVER 2 HALF TERMS</u></p>



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<p><u>Objectives:</u> <u>Materials, including changing materials:</u> Explore the natural world around them. Describe what they see, hear and feel whilst outside.</p> <p><u>Vocabulary:</u> ice, water, frozen, icicle, snow, melt, wet, cold, slippery, smooth, big, bigger, biggest, smaller, smaller, smallest, hard, soft, bendy, rigid, wood, plastic, paper, card, metal, strong, weak, hot, apply heat, waterproof, soggy, not waterproof, best, change, change back, solid, liquid, gas, most suited</p> <p><u>Objectives:</u> <u>Light:</u> Describe what they see, hear and feel whilst outside.</p> <p><u>Vocabulary:</u> un, sunny, light, shadow, shady, clouds, torch, see-through, non-see-through, source, light source, casting a shadow, pale, dark, transparent, opaque</p> <p><u>Objectives:</u> <u>Forces:</u> Explore the natural world around them. Describe what they see, hear and feel whilst outside.</p> <p><u>Vocabulary:</u></p>	<p><u>Vocabulary:</u> winter, summer, autumn, spring, months, year, seasons, weather, day length</p> <p><u>Lesson 2:</u> What changes happen in the 4 seasons? <u>Objective:</u> Observe changes across the four seasons. <u>Vocabulary:</u> winter, summer, autumn, spring, months, year, seasons, weather, day length</p> <p><u>Lesson 3:</u> Does the weather change across the seasons? <u>Objective:</u> Observe and describe weather associated with the seasons and how day length varies <u>Vocabulary:</u> winter, summer, autumn, spring, months, year, seasons, weather, day length, varies, temperature, cold, warm, hot, freezing, clothing, sunrays</p> <p><u>Lesson 4:</u> How do the seasons impact on the length of our day? <u>Objective:</u> Observe and describe weather associated with the seasons and how day length varies <u>Vocabulary:</u> winter, summer, autumn, spring, months, year, seasons, weather, day length, sunrise, sunset, morning, evening, dusk, dawn</p> <p><u>Lesson 5:</u> How do animals adapt to the seasons? <u>Objective:</u> Observe changes across the four seasons.</p>	<p><u>Lesson 1:</u> What are the everyday objects around us made of? <u>Objective:</u> Identify and describe the suitability of a variety of everyday materials, including wood, metal, glass, brick, rock, paper and cardboard for particular uses <u>Vocabulary:</u> cardboard, wood, metal, glass, plastic, brick, rock, paper, rubber</p> <p><u>Lesson 2:</u> Are all materials suitable for everyday objects? <u>Objective:</u> Identify and describe the suitability of a variety of everyday materials, including wood, metal, glass, brick, rock, paper and cardboard for particular uses <u>Vocabulary:</u> Y1 vocab revisited- waterproof, absorbent, stretchy, stiff, properties, floppy, bendy, rough, smooth, shiny, dull, see-through, not-see through, hard, soft Y2-opaque, transparent, translucent, reflective, non-reflective, flexible, rigid</p> <p><u>Lesson 3/4:</u> How can materials be shaped? (2 part lesson) <u>Objective:</u> Find out how the shapes of solid objects can be changed by squashing, bending, twisting and stretching <u>Vocabulary:</u> push/pushing, pull/pulling, twist/twisting, squash/squashing, bend/bending, stretch, stretching</p> <p><u>Lesson 5:</u> Can a material have more than one use? <u>Objective:</u> Identify and describe the suitability of a variety of</p>
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<p>float, sink, up, down, top, bottom, surface, move, roll, drop, fly, turn, spin, fall, fast, slow, faster, slower, fastest, slowest, further, furthest, wind, air, water, blow, bounce, force, rotate, solid, liquid, gravity</p> <p><u>Objectives:</u> <u>Sound:</u> Describe what they see, hear and feel whilst outside.</p> <p><u>Vocabulary:</u> sound, noise, listen, hear, music, voices, bird song, traffic, sirens, thunder, high, low, loud, quiet, soft, volume, crackle, thunder, hum, buzz, roar, source, crescendo, vibration, pitch</p>	<p>Vocabulary: winter, summer, autumn, spring, months, year, seasons, weather, day length, hibernate, adapt, characteristics, features, environment</p>	<p>everyday materials, including wood, metal, glass, brick, rock, paper and cardboard for particular uses</p> <p>Vocabulary: suitable, uses, properties, purposes</p> <p>Lesson 6: How can we test suitability of materials? Objective: Identify and describe the suitability of a variety of everyday materials, including wood, metal, glass, brick, rock, paper and cardboard for particular uses</p> <p>Vocabulary: suitable, uses, properties, purposes, compare, test</p>
<p><u>Objective:</u> <u>Earth and space:</u> Explore the natural world around them. Describe what they see, hear and feel whilst outside</p> <p><u>Vocabulary:</u> Sun, Moon, Earth, star, planet, sky, day, night, space, round, bounce, float, sunrise, sunset, astronaut, astronomer, constellation, orbit, nocturnal, slow-motion, magnify</p>	<p><u>What are some of the names and basic structures of plants? (Biology)</u></p> <p>Lesson 1: How do plants start to grow? Objective: Identify and describe the basic structure of a variety of common flowering plants, including trees. Vocabulary: seed, bulb, soil, nutrients, water, sun light, temperature, conditions, roots, grow, bud, leaf, flower, petal, blossom, branch, stalk, bud, stem, trunk, berry, fruit</p> <p>Lesson 2: Why don't all trees lose their leaves? What are the main features of a tree? Objective: Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. Vocabulary: seasons, weather, leaves, shed</p> <p>Lesson 3: What are the different types of trees?</p>	<p><u>What do humans need to survive and be healthy? How do animals and humans grow? (Biology)</u></p> <p>Lesson 1: What are the basic needs of animals and humans? Objective: Find out about and describe the basic needs of animals, including humans, for survival (water, food and air) Vocabulary: growth, exercise, heartbeat, breathing, food types (nutrients), feeding, drinking, survive</p> <p>Lesson 2: Why is exercise and diet important? Objective: Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. Vocabulary: exercise, health, heartbeat, fitness, disease, diet, food types (meat, fish, bread, rice, pasta), growth, weight</p>



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Objective: Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.

Vocabulary: deciduous, evergreen, holly, sycamore, birch, beech, oak, hawthorn, hazel, pine, cedar, yew, chestnut, hornbeam, alder

Lesson 4: What different plants can we find?

Objective: Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.

Vocabulary: daisy, poppy, rose, dandelion, pansy, stinging nettle (others in school area)

Consolidation

Spring 2

Lesson 1: Can I plant peas and observe them over time?

Objective: Identify and describe the basic structure of a variety of common flowering plants, including trees.

Vocabulary: seed, bulb, soil, nutrients, water, sun light, temperature, conditions, roots, grow, bud, leaf, flower, petal, berry, fruit.

Lesson 2: Can I observe changes to my pea plant?

Objective: Identify and describe the basic structure of a variety of common flowering plants, including trees.

Vocabulary: seed, bulb, shoot, analyse, explain, graph, water, sunlight, soil, space, nutrients, temperature, conditions, germinate.

Lesson 3: What makes up a healthy diet?

Objective: Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.

Vocabulary: food types (meat, fish, bread, rice, pasta), growth, weight, diet, balance

Lesson 4: How can we plan exercise into our day?

Objective: Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.

Vocabulary: exercises (examples such as star jump, lunge etc), stretch, warm up

Lesson 5: What does it mean to be hygienic?

Objective: Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.

Vocabulary: hygienic, clean, germs, disease, wash, odour (smell)

Lesson 6: How do animals and humans grow?

Objective: Notice that animals, including humans, have offspring which grow into adults

Vocabulary: offspring, reproduction, growth, child, young/old stages, animal examples (eg chick/hen, caterpillar/butterfly, tadpole/frog)



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Lesson 3&4: Can I observe, analyse and explain what has happened to my plant over time?

Objective: Identify and describe the basic structure of a variety of common flowering plants, including trees.

Vocabulary: seed, bulb, shoot, water, sunlight, soil, space, nutrients, temperature, conditions, germinate, trowel, ground, watering can, plant pot.

British Science Week

Lesson 5: Can I explore a variety of minibeasts?

Vocabulary: millipede, sun beetle, tarantula, stick insect, meal worm, habitat, climate, diet.

Lesson 6: Can I investigate how animals adapt to their environment over time?

Vocabulary: adapt, environment, predator, prey, camouflage.

Consolidation

Lesson 7: Can I observe seasonal changes?

Objective: Observe changes across the four seasons.

Vocabulary: winter, summer, autumn, spring, months, year, seasons, weather, day length



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What are everyday objects made of and what are their properties? (Chemistry)

Lesson 1: What materials are the objects in our classroom made of?

Objective: 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.

Vocabulary: wood, plastic, glass, rubber, chalk, fabric, metal (others in classroom)

Lesson 2: How can we sort objects based on their materials?

Objective: 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.

Compare and group together a variety of everyday materials on the basis of their simple physical properties.

Vocabulary: waterproof, absorbent, stretchy, flexible, stiff, floppy, bendy, rough, smooth, shiny, dull, see-through, not-see through, hard, soft

Lesson 3: Are all materials suitable for all objects?

Objective: Describe the simple physical properties of a variety of everyday materials.

How do plants grow and what do they need in order to do so? (Biology)

Lesson 1: What is the difference between bulbs and seeds?

Objective: Observe and describe how seeds and bulbs grow into mature plants

Vocabulary: bulbs, seeds, daffodil, garlic, onion, coconut, sweetcorn kernel (different examples)

Lesson 2: What do seeds and bulbs need to grow?

Objective: Observe and describe how seeds and bulbs grow into mature plants Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy (Observe over time)

Vocabulary: bulbs, seeds, light, shade, sun, warm, cool, water, grow, healthy

Lesson 3: How do plants grow under different conditions?

Objective: Observe and describe how seeds and bulbs grow into mature plants Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy (Observe over time)

Vocabulary: bulbs, seeds, light, shade, sun, warm, cool, water, grow, healthy, conditions

Lesson 4: What was the impact on the growth of plants under different conditions?



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Vocabulary: suitability, appropriate, waterproof, absorbent, stretchy, flexible, stiff, properties, floppy, bendy, rough, smooth, shiny, dull, see-through, not-see through, hard, soft

Lesson 4: What materials are absorbent?

Objective: 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.

Vocabulary: waterproof, absorbent

Lesson 5: What are the properties of materials?

Objective: Describe the simple physical properties of a variety of everyday materials.

Vocabulary: waterproof, absorbent, stretchy, flexible, stiff, properties, floppy, bendy, rough, smooth, shiny, dull, see-through, not-see through, hard, soft

Objective: Observe and describe how seeds and bulbs grow into mature plants Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy (Observe over time)

Vocabulary: bulbs, seeds, light, shade, sun, warm, cool, water, grow, healthy, conditions