

	Understanding the World - The World
Nursery	<ul style="list-style-type: none"> • Comments and asks questions about aspects of their familiar world such as the place where they live or the natural world. • Can talk about some of the things they have observed such as plants, animals, natural and found objects. • Talks about why things happen and how things work. • Developing an understanding of growth, decay and changes over time. • Shows care and concern for living things and the environment.
Reception	<ul style="list-style-type: none"> • Looks closely at similarities, differences, patterns and change.
ELG	<ul style="list-style-type: none"> • Children know about similarities and differences in relation to places, objects, materials and living things. • They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur, and talk about changes.

Airedale Infant School

Skills Progression for Science

<u>KS1 Strand</u>	<u>KS1 Progression of Skills</u>	
Working Scientifically	<u>Year 1</u> Life Processes, Changing Materials, Working Scientifically	<u>Year 2</u> Every Day Materials, Working scientifically (Great Fire of London - Buring), Animals inc Humans, Working Scientifically—Forces, Plants
Questioning & Enquiring & Planning	Ask simple questions about the world around us Begin to recognise that they can be answered in different ways	Ask questions about the world around us Recognise that they can be answered in different ways Begin to recognise what is need for a fair test
Vocabulary	Question, find out, observe, describe, test, compare • Measure, length, height, mass/weight, time, temperature • Record, results, table, chart, pictograph, block graph, bar chart	Question, find out, observe, describe, test, compare • Measure, length, height, mass/weight, time, temperature • Record, results, table, chart, pictograph, block graph, bar chart
Tracking Evidence	Skills - being curious about the world around us <ul style="list-style-type: none"> Ask a few simple questions about the world around us - using appropriate question stems Begin to use some different types of enquiry to answer questions - ask their own questions about what they notice. Observation over time. Pattern seeking. Identifying, classifying and grouping. Carry out simple comparative and fair testing. 	Skills - being curious about the world around us <ul style="list-style-type: none"> Ask simple questions about the world around us - using appropriate question stems Begin to use different types of enquiry to answer questions - communicate their ideas, what they do and what they find out in a variety of ways. Begin to respond to questions in different ways. Observation over time. Pattern seeking. Identifying, classifying and grouping. Comparative and fair testing. Research using secondary sources.

Airedale Infant School

Skills Progression for Science

<u>KS1 Strand</u>	<u>KS1 Progression of Skills</u>	
Working Scientifically	<u>Year 1</u>	<u>Year 2</u>
Observation and Recording	<p>Respond to prompts by making some suggestions about how to make an observation.</p> <p>Use senses and simple equipment to make observations.</p> <p>Talk about what happens and record using words and pictures</p> <p>Begin to record data in simple templates.</p>	<p>Carry out instructions for a simple investigation.</p> <p>Talk about and record what is seen and observed</p> <p>Take accurate measurements using simple equipment, e.g. rulers, cylinders and weighing scales with one interval.</p> <p>Begin to identify and classify data and information.</p> <p>Record data using simple charts, tables and block graphs</p>
Vocabulary	<p>Question, find out, observe, describe, test, compare • Measure, length, height, mass/weight, time, temperature • Record, results, table, chart, pictograph, block graph, bar chart</p>	<p>Question, find out, observe, describe, test, compare • Measure, length, height, mass/weight, time, temperature • Record, results, table, chart, pictograph, block graph, bar chart</p>
Tracking Evidence	<p>Skills - making sense of what we are observing, putting into own words</p> <p>Recording:</p> <ul style="list-style-type: none"> • Use drawings or annotated diagram <p>Measuring:</p> <ul style="list-style-type: none"> • Say what I am looking for/measuring • Use non standard units of measurement and begin to use simple standard units • Use simple equipment - counters, containers, feely bags (equipment using non standard) <p>Observing:</p> <ul style="list-style-type: none"> • Observe changes over time 	<p>Skills - follow instructions, begin to understand what they are seeing/observing and what this means, use different ways to show what they have found out.</p> <p>Recording:</p> <ul style="list-style-type: none"> • Use tables and graphs • Answer questions in sequence <p>Measuring:</p> <ul style="list-style-type: none"> • Say what I am looking for/measuring and discuss • Begin to use simple standard units or measurement—cm, l, g and degrees • Use simple equipment - jugs, cylinders, rulers, trundle wheels, data loggers (equipment using standard units) <p>Observing:</p> <ul style="list-style-type: none"> • Observe and discuss changes over time

Airedale Infant School

Skills Progression for Science

<u>KS1 Strand</u>	<u>KS1 Progression of Skills</u>	
Working Scientifically	<u>Year 1</u>	<u>Year 2</u>
Conclusions	<p>Begin to use simple features to compare objects, materials and living things.</p> <p>Identify what has changed when observing objects, living things or events.</p> <p>Talk in simple terms about what might happen based own experiences.</p>	<p>Talk about describe and sort simple similarities and differences, noting patterns and relationships.</p> <p>Record and communicate findings in a range of ways using simple scientific language.</p> <p>Talk about what has been found out and how it was discovered.</p> <p>Talk in simple scientific terms about what might happen</p> <p>Begin to describe fair tests</p>
Vocabulary	<p>Question, find out, observe, describe, test, compare • Measure, length, height, mass/weight, time, temperature • Record, results, table, chart, pictograph, block graph, bar chart</p>	<p>Question, find out, observe, describe, test, compare • Measure, length, height, mass/weight, time, temperature • Record, results, table, chart, pictograph, block graph, bar chart</p>
Tracking Evidence	<p>Skills - using what they have found/observed in discussion</p> <p>Through formal/informal discussions:</p> <ul style="list-style-type: none"> • Begin to talk about what I have found out • Begin to explain investigations • Begin to suggest simple changes that could be made 	<p>Skills - be able to talk about things they have observed/found out using scientific language</p> <ul style="list-style-type: none"> • Talk about what I have found out • Explain investigations • Suggest simple changes that could be made • Write simple paragraphs to explain findings - selecting one element e.g. an anomalous result

Airedale Infant School

Skills Progression for Science

<u>KS1 Strand</u>	<u>KS1 Progression of Skills</u>	
	<u>Year 1</u>	<u>Year 2</u>
Plants	<p>Use senses to explore and talk about plants.</p> <p>Describe what a plant looks like.</p> <p>Identify and the basic structure of common plants, including garden plants and trees, both deciduous and evergreen.</p>	<p>Observe and describe how seeds and bulbs grow into mature plants.</p> <p>Identify and describe the basic structure and function of a flowering plant including roots, stem/trunk, leaves and flowers.</p> <p>Find out about and describe what plants need to grow and stay healthy, including, water, light and temperature.</p>
Vocabulary	Deciduous, Evergreen trees, Leaves, Flowers (blossom), Petals, Fruit, Roots, Bulb, Seed, Trunk, Branches, Stem	Seeds, Bulbs, Water, Light, Temperature, Growth, grow, healthy, water, soil, nutrients · Leaves, flowers, blossom, petals, fruit, roots, trunk, branches, stem
Humans Including Animals	<p>Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</p> <p>Name and talk about their members of immediate and extended family.</p> <p>Identify, name and describe a variety of common animals including fish, amphibians, reptiles, birds and mammals, carnivores, herbivores and omnivores.</p> <p>Describe and compare the structure of common animals such as birds, fish, reptiles and pets</p> <p>Describe what is needed to healthy and clean.</p>	<p>Draw and label the main parts of the human body and link body parts to the associated senses.</p> <p>Name and talk about the young of humans and other animals.</p> <p>Identify and name a variety of common animals such as amphibians, mammals and invertebrates.</p> <p>Find out about and describe the basic needs of animals including humans for survival (water, food and air)</p> <p>Describe the importance for humans of exercise, a balanced diet and hygiene, including how to look after teeth.</p>
Vocabulary	<p>Fish, Reptiles, Mammals, Birds, Amphibians (+ examples of each) Herbivore, Omnivore, Carnivore, Leg, Arm, Elbow, Head, Ear, Nose, Back, Wings, Beak</p> <p>Herbivore, carnivore, omnivore · See, look, hear, listen, touch, feel, taste, smell</p>	<p>Reproduce, offspring, grow, adults (fish, amphibian, reptile, bird, mammal, humans) · Survival, water, food, air, shelter · Exercise, fit, healthy, food, fruit, vegetables, meat, fish, eggs, nuts, pulses, beans, milk, cheese, bread, pasta, rice, butter, vegetable oil, olive oil · Common names of fish, amphibians, reptiles, birds, mammals including pets and those found in the local environment · Common structure of animals and humans including: head, face, ears, hair, eyes, nose, mouth, teeth, cheek, chin, neck, body, arms, hands, fingers, paws, fins, wings, legs, feet, toes, tail, skin, scales, fur, feathers · Herbivore, carnivore, omnivore</p>

Airedale Infant School

Skills Progression for Science

<u>KS1 Strand</u>	<u>KS1 Progression of Skills</u>	
	<u>Year 1</u>	<u>Year 2</u>
Processes Life	<p>Use the senses to describe similarities and differences.</p> <p>Identify the parts of the body associated with the each of the senses</p>	<p>Explore and compare the differences between things that are living, dead and things that have never been alive.</p>
Vocabulary	<p>Sight, smell, touch, hear, taste, sweet, sour, light, dark, soft, smooth, rough, loud , quiet, strong, perfume, pleasant</p>	<p>Living, dead, never alive, habitats, micro-habitats, food, food chain, sun, grass, cow, human, alive, healthy, logs, leaf litter, stony, path, under, bushes, shelter, seashore, woodland, ocean, rainforest, conditions, hot/warm/cold, dry/damp/wet, bright/shade/dark</p>
All Living Things	<p>Identify and talk about a range of common animals.</p> <p>Talk about similarities between animals and plants and where some animals & plants are found.</p> <p>Talk about what animals eat.</p>	<p>Sort and group plants and animals according to simple features.</p> <p>Identify a range of similarities and differences between animals and plants.</p> <p>Describe how animals obtain their food from plants and other animals.</p> <p>Explore the habitats of living things, recognising the features of that habitat that meet the basic needs of the plants and animals that live there and how they depend on each other.</p> <p>Identify and name a variety of plants and animals in their habitats, including microhabitats.</p>
Vocabulary	<p>Carnivore, omnivore, herbivore, fish, amphibians, reptiles, birds, mammals, pets, wild, meat, plants</p>	<p>Living, dead, non-living · Habitat, micro habitat, food chain · Field, hedgerow, pond, woodland, seashore, ocean, rainforest, Arctic, desert · Air, food, water, shelter, heat, warmth, sun</p>

Airedale Infant School
Skills Progression for Science

<u>KS1 Strand</u>	<u>KS1 Progression of Skills</u>	
	<u>Year 1</u>	<u>Year 2</u>
Earth and Space	<p>Name the four seasons and describe the changes that take place.</p> <p>Observe and describe the weather associated with the seasons.</p>	
Vocabulary	<p>Spring, summer, autumn, winter · Day, night, light, dark, sunrise, sunset · Sun, rain, snow, hail, precipitation, wind, cloud, cloud cover · Deciduous, evergreen tree</p>	

Airedale Infant School
Skills Progression for Science

<u>KS1 Strand</u>	<u>KS1 Progression of Skills</u>	
	<u>Year 1</u>	<u>Year 2</u>
Everyday Materials	<p>Distinguish between an object and the material from which it is made.</p> <p>Identify and name some everyday materials.</p> <p>Use senses to explore a wide range of materials.</p>	<p>Identify and name a variety of everyday materials, including wood, plastics, glass, metal, water and rock.</p> <p>Describe the physical properties of a range of everyday materials.</p> <p>Identify and compare the suitability of a range of everyday materials based on simple physical properties, e.g. smooth, soft, hard...</p> <p>Talk about what common materials are used for, e.g. glass for windows.</p>
Vocabulary	<p>Wood, plastic, glass, metal, water, rock, brick, paper, card, rubber, fur, fleece, cotton, wool, polyester, cotton wool • Names of common objects made from these materials e.g. door, building block, window, pencil sharpener, teddy etc. •</p>	<p>Wood, plastic, glass, metal, water, rock, brick, paper, card, rubber, fur, fleece, cotton, wool, polyester, cotton wool •</p>