



Science – Progression in Knowledge, Scientific Enquiry and Vocabulary

Year One	Autumn One Biology Animals, Including Humans Ourselves	Autumn Two Biology Animals, Including Humans Our Pets	Spring One Physics Everyday Materials Let's Build	Spring Two Physics Everyday Materials Marvellous Materials	Summer One Biology Seasonal Change Wonderful Weather	Summer Two Biology Plants What's Growing in Our Gardens?
Key prior knowledge	EYFS	Year 1 – Autumn 1 – Animals, Including Humans - Ourselves	EYFS	Year 1 – Spring One - Everyday Materials, Let's Build	EYFS	EYFS
Unit Objectives	Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense	Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)	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	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	Observe changes across the four seasons Observe and describe weather associated with the seasons and how day length varies	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
Key enquiries	Session 1 Look how we've changed! Session 2 Look at our bodies! Session 3 What can we hear? Session 4 How can we sort things using senses? Session 5 Sense explorers Session 6 Make sensory boards and bottles	Session 1 Environment exploration Session 2 Where do woodlice like to live? Session 3 The puppy has made a mess! Session 4 Imaginary pets Session 5 My pet is happy and healthy! Session 6 Bring your pet to school day	Session 1 What materials can we find? Session 2 Matching materials! Session 3 Magnets and metal Session 4 Sorting objects Session 5 3 little pigs and their building choices Session 6 The alternative 3 little pigs	Session 1 Mending a Torn Umbrella: Part 1 Session 2 Mending a Torn Umbrella: Part 2 Session 3 Ice Observation Session 4 Frozen! Session 5 Puddle Observation: Part 1	Session 1 What do we know about weather? Session 2 Weather watching Session 3 Shadow Fun Session 4 Setting up a weather station: measuring rainfall Session 5 Setting up a weather station: measuring wind direction Session 6 Setting up a weather station: make a thermometer box	Session 1 Going and growing outside Session 2 One potato, two potato Session 3 Garden centres and seeds Session 4 What lives in the garden? Session 5 What's inside a flower? Session 6 What's inside a tree?



<p>Sticky Knowledge</p>	<p>Be able to name and locate parts of the human body, including those relating to the senses. Be able to identify and name different common animals including fish amphibians, reptiles, birds and mammals. Be able to describe and compare the observable features of animals from a range of groups. Recognise that animals can be grouped according to whether they are carnivores, herbivores and omnivores. Know the basic needs of animals for survival.</p>	<p>Be able to name and locate parts of the human body, including those relating to the senses. Be able to identify and name different common animals including fish amphibians, reptiles, birds and mammals. Be able to describe and compare the observable features of animals from a range of groups. Recognise that animals can be grouped according to whether they are carnivores, herbivores and omnivores. Know the basic needs of animals for survival.</p>	<p>Recognise the difference between the name of an object and the material from which it is made. Identify a range of everyday materials including wood, plastic, glass, metal, water and rock. Describe the physical properties of everyday materials including hard/soft, stretchy/stiff, shiny/dull, rough/smooth, bendy/not bendy, waterproof/ not waterproof, absorbent/ not absorbent, opaque/ transparent. Understand how to group everyday materials according to their physical properties.</p>	<p>Recognise the difference between the name of an object and the material from which it is made. Identify a range of everyday materials including wood, plastic, glass, metal, water and rock. Describe the physical properties of everyday materials including hard/soft, stretchy/stiff, shiny/dull, rough/smooth, bendy/not bendy, waterproof/ not waterproof, absorbent/ not absorbent, opaque/ transparent. Understand how to group everyday materials according to their physical properties.</p>	<p>Understand and describe the main changes across the seasons. Understand weather associated with the seasons. Understand how day length varies across the year.</p>	<p>Be able to name a variety of different plants (including deciduous and evergreen trees). Understand and describe how plants are suited to different habitats. Understand and describe the structure of plants including leaves, flowers (blossom), petals, fruit, roots, bulb, seed, trunk, branches and stem.</p>
<p>Scientific Enquiry</p>	<p>i) asking simple questions and recognising that they can be answered in different ways ii) observing closely, using simple equipment iii) performing simple tests iv) identifying and classifying v) using their observations and ideas to suggest answers to questions vi) gathering and recording data to help in answering questions</p>	<p>i. asking simple questions and recognising that they can be answered in different ways ii. observing closely, using simple equipment iii. performing simple tests iv. identifying and classifying v. using their observations and ideas to suggest answers to questions vi) gathering and recording data to help in answering questions</p>	<p>i) asking simple questions and recognising that they can be answered in different ways ii) observing closely, using simple equipment iii) performing simple tests iv) identifying and classifying v) using their observations and ideas to suggest answers to questions vi) gathering and recording data to help in answering questions</p>	<p>i) asking simple questions and recognising that they can be answered in different ways ii) observing closely, using simple equipment iii) performing simple tests iv) identifying and classifying v) using their observations and ideas to suggest answers to questions vi) gathering and recording data to help in answering questions</p>	<p>i) asking simple questions and recognising that they can be answered in different ways ii) observing closely, using simple equipment iii) performing simple tests iv) identifying and classifying v) using their observations and ideas to suggest answers to questions vi) gathering and recording data to help in answering questions</p>	<p>i) asking simple questions and recognising that they can be answered in different ways ii) observing closely, using simple equipment iii) performing simple tests iv) identifying and classifying v) using their observations and ideas to suggest answers to questions vi) gathering and recording data to help in answering questions</p>
<p>Vocabulary</p>	<p>compare, describe, similar, different, baby, adult, changes, growing patterns, compare, measure, record, data, gather, predict, centimetre, millimetre test, ears, senses, hearing, patterns, classify, identify, tongue, taste, touch, sight,</p>	<p>notice, patterns, behaviour, habitat, living things, damp, shady, dry, vertebrate, invertebrate, backbone observations, prediction, habitat happy, healthy, explore, investigate, observe birds, fish, amphibians, reptiles, mammals,</p>	<p>rough/smooth, flat/bumpy, sharp/blunt, wood, metal, plastic, glass, rock, materials, properties, magnetic, non-magnetic, useful</p>	<p>waterproof, absorbent, lightweight, breaks/tears, materials, properties water, ice, melts, frozen, observe, materials, properties water, puddle, evaporation, bigger, smaller, materials, properties</p>	<p>rain, snow, storm, thunder, lightning, cloudy, clothing, warm, cold, forecast, summer, autumn, winter, spring, seasons, shadow, sun, earth, space, light, dark, spin, day, night, weather, rainfall, precipitation, data, wind,</p>	<p>plant, leaf, grow, weed, change, living, water, healthy, similar to, different from, chitting, potato, seeds, garden centre, pollen, flower, deciduous, evergreen, roots, stem, leaves, trunk, bark</p>



	touch, taste, smell, hear, sense, sensory.	invertebrates, group, classify, compare, similarities, differences, pets, health, care			direction, gauge, patterns, temperature, thermometer	
Where Next?	Year 1 – Autumn 2 – Our Pets	Year 2 – Autumn 1 – Healthy Animals	Year 1 – Spring 2 – Marvellous Materials	Year 2 – Spring 1 – Materials Matter	Year 4 – Climate Change	Year 2 – Summer 1 – Ready, Steady, Grow!