# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

## Curriculum Overview

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|---|---|---|---|---|---|---|
| Animals inc. Humans - Biology | | | | | | |
| Plants - Biology | | | | | | |
| Living Things & Their Habitats - Biology | | | | | | |
| Evolution & Inheritance - Biology | | | | | | |
| Seasonal Changes - Physics | | | | | | |
| Forces - Physics | | | Forces & Magnets | | Forces | |
| Light - Physics | | | | | | |
| Sound - Physics | | | | | | |
| Earth & Space - Physics | | | | | | |
| Electricity - Physics | | | | | | |
| Materials - Chemistry | Everyday Materials | Use of Everyday Materials | Rocks | States of Matter | Properties & Changes of Materials | |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| Year | Term 1 | Term 2 | Term 3 | Term 4 - *Pupil Led Investigation* | Term 5 | Term 6 |
|---|---|---|---|---|---|---|
| **YR** | **Topic:** Ourselves/ International Term<br><br>**Investigation:**<br>My Body<br>My Senses<br>Growing up<br>Keeping Healthy | **Topic:** Celebrations/ Festivals<br><br>**Investigation:**<br>Cooking: Cultural Foods<br>Light & Dark<br>Snow – ice, melting | **Topic:** Superheroes<br><br>**Investigation:**<br>Magnetics<br>UoW – Emergency Services<br>Caring for Living Things | **Topic:** Animals<br><br>**Investigation:**<br>Caring for Living Things<br>Habitats<br>Similarities/differences between animals | **Topic:** The Global Garden - Minibeasts<br><br>**Investigation:**<br>Minibeasts and Pollinators<br>Life Cycles<br>Growing & Changing<br>On/Under the Water | **Topic:** Journeys<br><br>**Investigation:**<br>Transport – Forces<br>Around the World<br>Space<br>Water – Sink/Float |
| **1** | **Topic:** Animals Including Humans<br><br>**TAPS Investigation:**<br>What body parts do I have? Which parts of my body are associated with my 5 senses?<br><br>**Working Scientifically Skill:** Use observations and ideas to suggest answers to questions | **Topic:** Seasonal Changes<br><br>**TAPS Investigation:**<br>How does our school environment change throughout the seasons? *(This topic should be touched upon throughout the year).*<br><br>**Working Scientifically Skill:** Observe over time and record data to help in answering questions | **Topic:** Animals Including Humans<br><br>**TAPS Investigation:**<br>How can I classify my favourite animal?<br><br>**Working Scientifically Skill:** Identify and classify | **Topic:** Pupil Led Investigations – Melting Ice & Water-Proofing Materials<br><br>**Investigation:**<br>Child-led, e.g. 'What melts ice quickly?'<br>How, what, why. | **Topic:** Plants<br><br>**TAPS Investigation:**<br>What is the structure of a plant?<br><br>**Working Scientifically Skill:** Observing closely | **Topic:** Everyday Materials<br><br>**TAPS Investigation:**<br>How would you group these materials?<br><br>**Working Scientifically Skill:** Classifying |
| **2** | **Topic:** Plants<br><br>**TAPS Investigation:**<br>What do plants need to grow and be healthy?<br><br>**Working Scientifically Skill:** Observe closely, using simple equipment | **Topic:** Animals Including Humans<br><br>**TAPS Investigation:**<br>How can we sort & compare living & non-living things?<br><br>**Working Scientifically Skill:** Use of appropriate scientific language to communicate their ideas | **Topic:** Uses of Everyday Materials<br><br>**TAPS Investigation:**<br>What material is the most waterproof? What material is the most suitable for making a bucket to put out a fire?<br><br>**Working Scientifically Skill:** Ask simple questions and recognise that they can be | **Topic:** Pupil Led Investigations<br><br>**Investigation:** Child-led, e.g. 'What is the stretchiest fabric?'<br>How, what, why. | **Topic:** Living Things and Their Habitats<br><br>**TAPS Investigation:**<br>How can we observe and research which animals live in our school environment?<br><br>**Working Scientifically Skill:** Identifying and classifying | **Topic:** Animals inc Humans<br><br>**TAPS Investigation:**<br>How can we match animals and their offspring?<br><br>**Working Scientifically Skill:** Pattern seeking |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | answered in different ways | | | |
| **3** | **Topic:** Light<br><br>**TAPS Investigation:** Can everything make a shadow?<br><br>**Working Scientifically Skill:** Gather and record data to answer questions | **Topic:** Forces and Magnets<br><br>**TAPS Investigation:** Which surface slows the toy car down the most?<br><br>**Working Scientifically Skill:** Gather, record and present data (in a table or bar chart) to help in answering questions | **Topic:** Animals Including Humans<br><br>**TAPS Investigation:** How is the human skeleton structured?<br><br>**Working Scientifically Skill:** Use different types of scientific enquiries to answer questions: secondary sources | **Topic:** Pupil Led Investigations<br><br>**Investigation:** Child-led relating to topic or own ideas. | **Topic:** Rocks<br><br>**TAPS Investigation:** What rocks are the most suitable for building houses and why?<br><br>**Working Scientifically Skill:** Reporting on findings from enquiries | **Topic:** Plants<br><br>**TAPS Investigation:** How much water do plants need?<br><br>**Working Scientifically Skill:** Making systematic and careful observations and measurements using standard units |
| **4** | **Topic:** Sound<br><br>**TAPS Investigation:** What makes the best string telephone?<br><br>**Working Scientifically Skill:** Identify differences, similarities or changes related to simple scientific ideas and processes | **Topic:** Electricity<br><br>**TAPS Investigation:** How can we make a purposeful switch?<br><br>**Working Scientifically Skill:** Using results to draw simple conclusions, make predictions for new values, suggest improvements | **Topic:** Animals Including Humans<br><br>**TAPS Investigation:** How do different drinks effect our teeth?<br><br>**Working Scientifically Skill:** Use results to draw simple conclusions, suggest improvements and raise further questions | **Topic:** Pupil Led Investigations<br><br>**Investigation:** Child-led relating to topic or own ideas. | **Topic:** Living Things and Their Habitats<br><br>**TAPS Investigation:** What vertebrates & invertebrates live in our local school environment?<br><br>**Working Scientifically Skill:** Gather, record and classify data | **Topic:** States of Matter<br><br>**TAPS Investigation:** Which conditions are the best to dry materials by evaporation?<br><br>**Working Scientifically Skill:** Set up a fair test |
| **5** | **Topic:** Forces | **Topic:** Earth and Space | **Topic:** Properties and Changes of Materials | **Topic:** Pupil Led Investigations | **Topic:** Living Things and Their Habitats | **Topic:** Animals Including Humans |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | | | | | | |
|---|---|---|---|---|---|---|
| | **TAPS Investigation:** How does the length of wing/number of paper clips/size of paper affect the time it takes for the spinner to fall?<br><br>**Working Scientifically Skill:** Measure, taking repeat readings | **TAPS Investigation:** How are 'craters' formed?<br><br>**Working Scientifically Skill:** Gather and record data using tables and graphs | **TAPS Investigation:** Which cup will keep the tea warm and insulate it for the longest?<br><br>**Working Scientifically Skill:** Use test results to make predictions to set up further comparative and fair tests | **Investigation:** Child-led relating to topic or own ideas. | **TAPS Investigation:** How are seeds dispersed in our local environment?<br><br>**Working Scientifically Skill:** Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables and bar graphs | **TAPS Investigation:** What could we measure to show how humans develop as they grow older?<br><br>**Working Scientifically Skill:** Take measurements using a range of equipment |
| **6** | **Topic:** Living Things and Their Habitats<br><br>**TAPS Investigation:** How can we classify animals on a classification key?<br><br>**Working Scientifically Skill:** Record the results of a survey using a classification key | **Topic:** Evolution and Inheritance<br><br>**TAPS Investigation:** How has my made-up animal adapted to live in its environment?<br><br>**Working Scientifically Skill:** Report and present | **Topic:** Light<br><br>**TAPS Investigation:** How does the shadow of an object change?<br><br>**Working Scientifically Skill:** Take accurate measurements and records data on a graph | **Topic:** Pupil Led Investigation<br><br>**Investigation:** Child-led relating to topic or own ideas | **Topic:** Animals including Humans<br><br>**TAPS Investigation:** How do different poses & positions effect my heart rate?<br><br>**Working Scientifically Skill:** Use test results to make predictions to set up further comparative and fair tests | **Topic:** Electricity<br><br>**TAPS Investigation:** How can you change the brightness of a bulb in a circuit?<br><br>**Working Scientifically Skill:** Plan a scientific enquiry to answer a question, recognising and controlling variables |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

## Knowledge Progression Map – Programme of Study and Vocabulary

This Progression Map shows the progression across the programme of study requirements. Statements here are taken directly from the national curriculum science programme of study and have been organised into topics.

This document shows the progression of required vocabulary that the children should understand throughout each topic as a prerequisite for further learning. Vocabulary is not exclusive to each year group, so it is not repeated on the grid in subsequent year groups for the same topic. For example, a year 2 child studying 'Animals including Humans' may use the vocabulary listed in the year 2 column as well as that in the year 1 column. Likewise, a year 6 child learning about 'Light' may use the year 3 vocabulary as well as the year 6.'

## Science Progression in EYFS

| | Nursery | Reception |
|---|---|---|
| Animals inc. Humans | • Learn about the life cycles of animals<br>• Compare adult animals to their babies<br>• Observe how baby animals change over time<br>• Learn about the life cycles of humans<br>• Learn about how to take care of themselves<br>• Learn about their senses | • Name and describe animals that live in different habitats<br>• Describe different habitats<br>• Describe people who are familiar to them<br>• Learn about how to take care of themselves |
| Plants | • Grow plants | |
| Living Things and their Habitats | • Explore the surrounding natural environment<br>• Explore natural objects from the surrounding environment | • Explore the plants in the surrounding natural environment<br>• Explore the animals in the surrounding natural environment<br>• Explore plants and animals in a contrasting natural environment |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | | |
|---|---|---|
| Seasonal Changes | | • Play and explore outside in all seasons and in different weather<br>• Observe living things throughout the year |
| Forces | • Feel forces<br>• Explore how things work<br>• Explore how objects/materials are affected by forces | • Explore how to change how things work<br>• Explore how the wind can move objects<br>• Explore how objects move in water |
| Light | • Explore light sources<br>• Shine light on or through different materials | • Explore shadows<br>• Explore rainbows |
| Sound | • Listen to sounds<br>• Make sounds | • Listen to sounds outside and identify the source<br>• Make sounds |
| Earth & Space | | • Learn about the Earth, Sun, Moon, planets and stars<br>• Learn about space travel |
| Electricity | • Identify electrical devices<br>Use battery-powered devices | |
| Materials | • Explore a range of materials<br>• Shape and join materials<br>• Combine and mix ingredients<br>• Change materials by heating and cooling, including cooking | • Explore a range of materials, including natural materials<br>• Make objects from different materials, including natural materials<br>• Observe, measure and record how materials change when heated and cooled<br>• Compare how materials change over time and in different conditions |

## Science Progression in KS1 & KS2

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|---|---|---|---|---|---|---|
| Animals inc Humans | **Pupils should be taught to:**<br>• identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals;<br>• identify and name a variety of common animals that are carnivores, herbivores and omnivores;<br>• describe and compare the structure of a variety | **Pupils should be taught to:**<br>• notice that animals, including humans, have offspring which grow into adults;<br>• find out about and describe the basic needs of animals, including humans, for survival (water, food and air);<br>• describe the importance for humans of exercise, eating the right amounts of different | **Pupils should be taught to:**<br>• identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat;<br>• identify that humans and some other animals have skeletons and muscles for support, | **Pupils should be taught to:**<br>• describe the simple functions of the basic parts of the digestive system in humans;<br>• identify the different types of teeth in humans and their simple functions;<br>• construct and interpret a variety of food chains, identifying producers, predators and prey. | **Pupils should be taught to:**<br>• describe the changes as humans develop to old age. | **Pupils should be taught to:**<br>• identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood;<br>• recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function;<br>• describe the ways in which nutrients and |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | | | | | | |
|---|---|---|---|---|---|---|
| | of common animals (fish, amphibians, reptiles, birds and mammals including pets);<br>• identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. | types of food, and hygiene. | protection and movement. | | | water are transported within animals, including humans. |
| Vocabulary Progression | • Names of animal groups: **fish, amphibians, reptiles, birds, mammals.**<br>• Animal diets: **carnivore, herbivore, omnivore.**<br>• Human and animal body parts: e.g. body, head, neck, arms, elbows, legs, knees, face, ears, eyes, nose, hair, mouth, teeth, hands, feet, tail, wings, feathers, fur, beak, fins, gills.<br>• Human senses: **sight, hearing, touch, smell, taste.**<br>• Exploring senses: loud, quiet, soft, rough.<br>• Other: human, animal, pet. | • Being born and growing: **Young, offspring, live young**, grow, **develop**, change, hatch, lay, fly, crawl, talk.<br>• Young and adult names: e.g. lamb and sheep, kitten and cat, duckling and duck.<br>• **Life cycle** stages: e.g. baby, toddler, child, teenager, **adult;** frogspawn, tadpole, froglet, frog.<br>• Survival and staying healthy: basic needs, survive, food, air, **exercise, diet, nutrition**, healthy, balanced diet, **hygiene, germs.**<br>• Food groups: fruit and vegetables, proteins, dairy and alternatives, carbohydrates, oil and spreads, fat, salt, sugar. | • Food groups and **nutrients**: fibre, fats **(saturated and unsaturated**), vitamins, minerals.<br>• Skeletons and muscles: skeleton, **muscles, tendons, joints,** protection, support, organs, voluntary muscles, involuntary muscles, biceps, triceps, contract, relax, bone, cartilage, shell, **vertebrate, invertebrate,** endoskeleton, exoskeleton, hydrostatic skeleton.<br>• Names of human bones: e.g. skull, spine, backbone, vertebral column, ribcage, pelvis, clavicle, scapula, humerus, ulna, pelvis, radius, femur, tibia, fibula.<br>• Other: **energy**. | • Digestive system: **digest**, digestion, tongue, teeth, saliva, salivary glands, **oesophagus, stomach,** liver, pancreas, gall bladder, **small intestine,** duodenum**, large intestine, rectum,** anus, faeces, organ.<br>• Types of teeth and dental care: **molar**, **premolar**, **incisor**, **canine**, wisdom teeth, tooth decay, plaque, enamel, baby (milk) teeth.<br>• Food chains and animal diets: decomposer, food web.<br><br>Previously introduced vocabulary: **producer,** consumer**, prey, predator,** excretion**,** habitat. | • Process of reproduction: **gestation, asexual reproduction, sexual reproduction,** sperm, egg, cells, clone.<br>• Changes and **life cycle:** embryo, foetus, uterus, **prenatal, adolescence, puberty, menstruation, adulthood,** menopause, **life expectancy,** old age, hormones, sweat.<br>• Changing body parts: e.g. breasts, penis, larynx, ovaries, genitalia, pubic hair.<br><br>Previously introduced vocabulary: reproduction, **reproduce,** types of animals and animal groups, **fertilisation.** | • **Circulatory system**: circulation, **heart**, pulse, heartbeat, heart rate, lungs, breathing, **blood vessels**, blood, pump, transported, **oxygenated blood, deoxygenated blood,** oxygen, arteries, veins, capillaries, chambers, plasma, platelets, white blood cells, red blood cells.<br>• Lifestyle: **drug, alcohol,** smoking, disease, calorie, energy input, energy output.<br>• Other: water transportation, nutrient transportation, waste products.<br><br>Previously introduced vocabulary: carbon dioxide. |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|---|---|---|---|---|---|---|
| Plants | **Pupils should be taught to:**<br>• identify and name a variety of common wild and garden plants, including deciduous and evergreen trees;<br>• identify and describe the basic structure of a variety of common flowering plants, including trees. | **Pupils should be taught to:**<br>• observe and describe how seeds and bulbs grow into mature plants;<br>• find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. | **Pupils should be taught to:**<br>• identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers;<br>• explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant;<br>• investigate the way in which water is transported within plants;<br>• explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. | | | |
| Vocabulary Progression | • Names of common plants: **wild plant, garden plant, evergreen** tree, **deciduous** tree, common flowering plant, **weed,** grass.<br>• Name some features of plants: e.g. **flower**, vegetable, **fruit**, berry, **leaf/leaves**, blossom, **petal**, **stem**, trunk, branch, | • Growth of plants: **germination**, **shoot, seed dispersal,** grow, food store, life cycle, die, wilt, seedling, sapling.<br>• Needs of plants: **sunlight, nutrition,** light, healthy, space, air.<br>• Name different types of plant: e.g. bean plant, cactus. | • Water transportation: transport, **evaporation, evaporate, nutrients,** absorb, anchor.<br>• Life cycle of flowering plants: **pollination** (insect/wind), pollen, nectar, pollinator, seed formation, **seed dispersal** (animal/wind/water), reproduce, | | | |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | | | | | | |
|---|---|---|---|---|---|---|
| | **root**, **seed, bulb,** soil.<br>• Name some common types of plant e.g. sunflower, daffodil. | • Names of different habitats: e.g. rainforest, desert.<br><br>Previously introduced vocabulary: **water**, **temperature**, warm, hot, cold, habitat. | **fertilisation,** fertilise, **stamen,** anther, filament, **carpel (pistil),** stigma, style, ovary, ovule, **sepal**, carbon dioxide.<br><br>Previously introduced vocabulary: life cycle**.** | | | |

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|---|---|---|---|---|---|---|
| Living Things & Their Habitats | | **Pupils should be taught to:**<br>• explore and compare the differences between things that are living, dead, and things that have never been alive;<br>• 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;<br>• identify and name a variety of plants and animals in their habitats, including microhabitats;<br>• describe how animals obtain their food from plants and | | **Pupils should be taught to:**<br>• recognise that living things can be grouped in a variety of ways;<br>• explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment;<br>• recognise that environments can change and that this can sometimes pose dangers to living things. | **Pupils should be taught to:**<br>• describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird;<br>• describe the life process of reproduction in some plants and animals. | **Pupils should be taught to:**<br>• describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals;<br>• give reasons for classifying plants and animals based on specific characteristics. |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | | | | | | |
|---|---|---|---|---|---|---|
| | | other animals, using the idea of a simple food chain, and identify and name different sources of food. | | | | |
| Vocabulary Progression | | • Living or dead**: living, dead, never living,** not living, alive, never been alive, healthy.<br>• **Habitats** including **microhabitats**: **depend,** shelter, safety, **survive**, suited, space, minibeast, air.<br>• **Life processes:** movement, sensitivity, growth, reproduction, nutrition, excretion, respiration.<br>• **Food chains: food sources,** food, producer, consumer, predator, prey.<br>• Names of habitats and microhabitats: e.g. under leaves, woodland, rainforest, sea shore, ocean, urban, local habitat.<br>Previously introduced vocabulary: senses, **carnivore**, **herbivore**, **omnivore**, **seed**, **water**, names of materials. | | • Living things: **organisms, specimen,** species.<br>• Grouping living things: **classification,** classification keys, classify, **characteristics**.<br>• Names of invertebrate animals: snails and slugs, worms, spiders, insects.<br>• Invertebrate body parts: e.g. wing case, abdomen, thorax, antenna, segments, mandible, proboscis, prolegs.<br>• Environmental changes: **environment,** environmental dangers, adapt, natural changes, climate change, deforestation, pollution, urbanisation, invasive species, **endangered species, extinct.**<br>Previously introduced vocabulary: carbon dioxide, **fish, bird, mammal, amphibian, reptile**, | • **Reproduction**: **asexual reproduction, sexual reproduction**, **gestation, metamorphosis,** gametes, tuber, runners/side branches, plantlet, cuttings, embryo, adolescent, penis, vagina, egg, pregnancy, gestation.<br>Previously introduced vocabulary: **life cycle, pollination,** offspring, **fertilise,** fertilisation, sepal, filament, anther, stamen, pollen, petal, stigma, style, ovary, carpel, ovule, stem, bulb, roots, mammal, adult, baby, sperm, cells, live young. | • Classifying: Carl Linnaeus, Linnaean system, flowering and non-flowering plants, variation.<br>• **Microorganisms**: **bacteria,** single-celled, microbes, microscopic, virus, fungi, fungus, mould, antibiotic, yeast, ferment, **microscope**, decompose. |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | skeleton, bone, **vertebrate, invertebrate,** backbone, names for animal body parts, names of common plants, photosynthesis. | | |

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|---|---|---|---|---|---|---|
| Evolution & Inheritance | | | | | | **Pupils should be taught to:**<br>• recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago;<br>• recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents;<br>• identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. |
| Vocabulary Progression | | | | | | • **Evolution** and **inheritance:** evolve, **adaptation,** inherit, **natural selection,** |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | **adaptive traits, inherited traits,** mutations, theory of evolution, ancestors, biological parent, chromosomes, genes, Charles Darwin.<br>• Other: selective breeding, artificial selection, breed, cross breeding, genetically modified food, cloning, DNA.<br><br>Previously introduced vocabulary: classification, **offspring, characteristics, habitat, environment,** adapt, **variations**, human, **fossil,** suited, cells, names of different habitats, names of animals and their body parts, species, **sedimentary rock**, lava, **igneous rock**, **metamorphic rock**, **magma**, heat, **fossilisation**. |

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|---|---|---|---|---|---|---|
| Seasonal Changes | **Pupils should be taught to:**<br>• observe changes across the 4 seasons;<br>• observe and describe weather associated with the | | | | | |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | | | | | | |
|---|---|---|---|---|---|---|
| | seasons and how day length varies. | | | | | |
| Vocabulary Progression | • **Seasons**: **spring, summer, autumn, winter**, seasonal change.<br>• **Weather**: e.g. sun, rain, snow, sleet, frost, ice, fog, cloud, hot/warm, cold, storm, wind, thunder, weather forecast.<br>• Measuring weather: temperature, rainfall, wind direction, thermometer, rain gauge.<br>• Day length: night, day, **daylight.** | | | | | |

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|---|---|---|---|---|---|---|
| Forces | | | Forces and Magnets<br>**Pupils should be taught to:**<br>• compare how things move on different surfaces;<br>• notice that some forces need contact between 2 objects, but magnetic forces can act at a distance;<br>• observe how magnets attract or repel each other and attract some materials and not others; | | Forces<br>**Pupils should be taught to:**<br>• explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object;<br>• identify the effects of air resistance, water resistance and friction, that act between moving surfaces;<br>• recognise that some mechanisms | |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | • compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials;<br>• describe magnets as having 2 poles;<br>• predict whether 2 magnets will attract or repel each other, depending on which poles are facing. | | including levers, pulleys and gears allow a smaller force to have a greater effect. | |
| Vocabulary Progression | | | • How things move: move, movement, **surface**, distance, strength.<br>• Types of **forces**: push, pull, contact force, non-contact force, **friction**.<br>• **Magnets: magnetic, magnetic field,** magnetic force, bar magnet, horseshoe magnet, ring magnet, magnetic **poles** (north pole, south pole), **attract, repel,** compass.<br>• Magnetic and non-magnetic materials: e.g. iron, nickel, cobalt.<br>Previously introduced vocabulary: metal, names of materials. | | • Types of forces: **air resistance, water resistance, buoyancy, upthrust,** Earth's **gravitational pull, gravity**, opposing forces, driving force.<br>• **Mechanisms:** levers, pulleys, gears/cogs.<br>• Measurements: **weight, mass,** kilograms (kg), Newtons (N), scales, speed, fast, slow.<br>• Other: **streamlined**, Earth.<br>Previously introduced vocabulary: air, heat, moon. | |

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|---|---|---|---|---|---|---|

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | | | | | | |
|---|---|---|---|---|---|---|
| Light | | | **Pupils should be taught to:**<br>• recognise that they need light in order to see things and that dark is the absence of light;<br>• notice that light is reflected from surfaces;<br>• recognise that light from the sun can be dangerous and that there are ways to protect their eyes;<br>• recognise that shadows are formed when the light from a light source is blocked by an opaque object;<br>• find patterns in the way that the size of shadows change. | | | **Pupils should be taught to:**<br>• recognise that light appears to travel in straight lines;<br>• use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye;<br>• explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes;<br>• use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them. |
| Vocabulary Progression | | | • **Light** and seeing: **dark,** absence of light, **light source,** illuminate, visible, **shadow, translucent,** energy, block.<br>• **Light sources:** e.g. candle, torch, fire, lantern, lightning.<br>• **Reflective light: reflect, reflection,** surface, **ray**, scatter, reverse, beam, angle, mirror, moon. | | | • Reflection: periscope.<br>• Seeing light: **visible spectrum, prism.**<br>• How light travels: light waves, wavelength, straight line, **refraction.**<br><br>Previously introduced vocabulary: names and properties of materials, absorb. |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | • Sun safety: dangerous, glare, damage, UV light, UV rating, sunglasses, direct.<br><br>Previously introduced vocabulary: **opaque, transparent,** sunlight, sun. | | | |

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|---|---|---|---|---|---|---|
| Sound | | | | **Pupils should be taught to:**<br>• identify how sounds are made, associating some of them with something vibrating;<br>• recognise that vibrations from sounds travel through a medium to the ear;<br>• find patterns between the pitch of a sound and features of the object that produced it;<br>• find patterns between the volume of a sound and the strength of the vibrations that produced it;<br>• recognise that sounds get fainter as the distance from the sound source increases. | | |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | | | | | | |
|---|---|---|---|---|---|---|
| Vocabulary Progression | | | | • Parts of the **ear**: **eardrum.**<br>• Making sound: **vibration,** vocal cords, **particles.**<br>• Measuring sound: **pitch**, **volume, amplitude, sound wave,** quiet, loud, high, low, travel**, distance.**<br>• Other: **soundproof, absorb sound.** | | |

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|---|---|---|---|---|---|---|
| Earth & Space | | | | | **Pupils should be taught to:**<br>• describe the movement of the Earth and other planets relative to the Sun in the solar system;<br>• describe the movement of the Moon relative to the Earth;<br>• describe the Sun, Earth and Moon as approximately spherical bodies;<br>• use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky. | |
| Vocabulary Progression | | | | | • Solar system: **star, planet.**<br>• Names of planets: Mercury, Venus, | |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | Earth, Mars, Jupiter, Saturn, Neptune, Uranus.<br>• Shape: **spherical bodies, sphere.**<br>• Movement: **rotate, axis, orbit, satellite.**<br>• Theories: **geocentric model, heliocentric model, astronomer.**<br>• Day length: sunrise, sunset, midday, time zone.<br><br>Previously introduced vocabulary: **Sun, moon, shadow**, day, night, heat, **light**, **reflect**. | |

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|---|---|---|---|---|---|---|
| Electricity | | | | **Pupils should be taught to:**<br>• identify common appliances that run on electricity;<br>• construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers;<br>• identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a | | **Pupils should be taught to:**<br>• associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit;<br>• compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches; |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | complete loop with a battery;<br>• recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit;<br>• recognise some common conductors and insulators, and associate metals with being good conductors. | | • use recognised symbols when representing a simple circuit in a diagram. |
| Vocabulary Progression | | | | • **Electricity:** mains-powered, battery-powered, **mains electricity,** plug, **appliances**, devices.<br>• Circuits: **circuit,** simple series circuit, complete circuit, incomplete circuit.<br>• Circuit parts: bulb, cell, wire, buzzer, switch, motor, **battery.**<br>• Materials: **electrical conductor, electrical insulator.**<br>• Other: safety.<br><br>Previously introduced vocabulary: names of materials. | | • Flow and measure of electricity: **voltage, amps, resistance, electrons**, volts (V), **current.**<br>• Circuits**: symbol,** circuit diagram, component, function, filament.<br>• Variations: dimmer, brighter, louder, quieter.<br>• Types of electricity: natural electricity, human-made electricity, solar panels, power station.<br>• Other: positive, negative. |

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|---|---|---|---|---|---|---|
| Materials | Everyday Materials<br>**Pupils should be taught to:** | Use of Everyday Materials | Rocks<br>**Pupils should be taught to:** | States of Matter<br>**Pupils should be taught to:** | Properties and Changes of Materials | |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | | | | | | |
|---|---|---|---|---|---|---|
| | • distinguish between an object and the material from which it is made;<br>• identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock;<br>• describe the simple physical properties of a variety of everyday materials;<br>• compare and group together a variety of everyday materials on the basis of their simple physical properties. | **Pupils should be taught to:**<br>• identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses;<br>• find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. | • compare and group together different kinds of rocks on the basis of their appearance and simple physical properties;<br>• describe in simple terms how fossils are formed when things that have lived are trapped within rock;<br>• recognise that soils are made from rocks and organic matter. | • compare and group materials together, according to whether they are solids, liquids or gases;<br>• observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C);<br>• identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. | **Pupils should be taught to:**<br>• compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets;<br>• know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution;<br>• use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating;<br>• give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic;<br>• demonstrate that dissolving, mixing and changes of state are reversible changes;<br>• explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with | |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | burning and the action of acid on bicarbonate of soda. | |
| Vocabulary Progression | • Names of **materials**: wood, plastic, glass, metal, water, rock, paper, cardboard, rubber, fabric.<br>• Properties of materials: **hard, soft, shiny, dull, stretchy**, **rough**, **smooth, bendy, not bendy, transparent, opaque, waterproof, not waterproof**, **absorbent, not absorbent,** sharp, stiff.<br>• Other: **object.** | • Changing shape: squash, bend, twist, stretch.<br>• **Properties of materials:** e.g. strong, flexible, light, hard-wearing, elastic.<br>• Other: **suitability**, recycle, pollution. | • Types of rock**: sedimentary rock, igneous rock, metamorphic rock.**<br>• **Properties of rocks: permeable,** semi-permeable, **impermeable,** durable.<br>• Names of rocks: e.g. marble, chalk, granite, sandstone, slate.<br>• Formation of rocks and fossils: natural, human-made, **magma, lava,** molten rock, **sediment, erosion, fossilisation,** layers, bone, fossil.<br>• Soil: sandy, chalky, clay, peaty, loamy, topsoil, subsoil, bedrock, mineral, organic matter, compost.<br>• Other: **palaeontology.**<br><br>Previously introduced vocabulary: soil, **water**, air. | • **States of matter: solids, liquids, gases,** particles.<br>• State change: **evaporate, condense, melt, freeze**, heat, cool, melting point, freezing point, boiling point, **water vapour**.<br>• Water cycle: **precipitation**, evaporation, condensation, ground run-off, collection, underground water, bodies of water (sea, river, stream), water droplets, hail.<br>• Other: atmosphere.<br><br>Previously introduced vocabulary: temperature, rain, cloud, snow, wind, sun, hot, cold, absorb, carbon dioxide | • Properties of **materials**: thermal **conductor/insulator,** magnetism, electrical resistance, **transparency**.<br>• Mixtures and solutions: dissolving, substance, soluble, insoluble.<br>• Changes of materials: reversible change, physical change, irreversible change, chemical change, burning, new material, product.<br>• Separating: sieving, filtering, magnetic attraction.<br><br>Previously introduced vocabulary: electrical **conductor/insulator,** bulb, **translucent**. | |

## Science Progression in KS3

| KS3 | |
|---|---|
| Animals inc Humans | • Reproduction in humans (as an example of a mammal), including the structure and function of the male and female reproductive systems, menstrual cycle (without details of hormones), gametes, fertilisation, gestation and birth, to include the effect of maternal lifestyle on the foetus through the placenta.<br>• The consequences of imbalances in the diet, including obesity, starvation and deficiency diseases. |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | |
|---|---|
| | • The effects of recreational drugs (including substance misuse) on behaviour, health and life processes.<br>• The structure and functions of the gas exchange system in humans, including adaptations to function.<br>• The mechanism of breathing to move air in and out of the lungs.<br>The impact of exercise, asthma and smoking on the human gas exchange system |
| Plants | • Reproduction in plants, including flower structure, wind and insect pollination, fertilisation, seed and fruit formation and dispersal, including quantitative investigation of some dispersal mechanisms. |
| Living Things and their Habitats | • Reproduction in humans (as an example of a mammal), including the structure and function of the male and female reproductive systems, menstrual cycle (without details of hormones), gametes, fertilisation, gestation and birth, to include the effect of maternal lifestyle on the foetus through the placenta.<br>• Reproduction in plants, including flower structure, wind and insect pollination, fertilisation, seed and fruit formation and dispersal, including quantitative investigation of some dispersal mechanisms.<br>• Differences between species. |
| Evolutions & Inheritance | • Heredity as the process by which genetic information is transmitted from one generation to the next.<br>• A simple model of chromosomes, genes and DNA in heredity, including the part played by Watson, Crick, Wilkins and Franklin in the development of the DNA model.<br>• The variation between species and between individuals of the same species means some organisms compete more successfully, which can drive natural selection.<br>• Changes in the environment may leave individuals within a species, and some entire species, less well adapted to compete successfully and reproduce, which in turn may lead to extinction. |
| Seasonal Changes | • The seasons and the Earth's tilt, day length at different times of year, in different hemispheres |
| Forces | • Magnetic fields by plotting with compass, representation by field lines.<br>• Earth's magnetism, compass and navigation.<br>• Forces as pushes or pulls, arising from the interaction between two objects.<br>• Using force arrows in diagrams, adding forces in one dimension, balanced and unbalanced forces.<br>• Moment as the turning effect of a force.<br>• Forces: associated with deforming objects; stretching and squashing – springs; with rubbing and friction between surfaces, with pushing things out of the way; resistance to motion of air and water.<br>• Forces measured in Newtons, measurements of stretch or compression as force is changed |
| Light | • The similarities and differences between light waves and waves in matter.<br>• Light waves travelling through a vacuum; speed of light.<br>• The transmission of light through materials: absorption, diffuse scattering and specular reflection at a surface.<br>• Use of ray model to explain imaging in mirrors, the pinhole camera, the refraction of light and action of convex lens in focusing (qualitative); the human eye.<br>• Light transferring energy from source to absorber leading to chemical and electrical effects; photo-sensitive material in the retina and in cameras.<br>• Colours and the different frequencies of light, white light and prisms (qualitative only); differential colour effects in absorption and diffuse reflection. |
| Sound | • Waves on water as undulations which travel through water with transverse motion; these waves can be reflected, and add or cancel – superposition.<br>• Frequencies of sound waves, measured in Hertz (Hz); echoes, reflection and absorption of sound.<br>• Sound needs a medium to travel, the speed of sound in air, in water, in solids. |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | |
|---|---|
| | • Sound produced by vibrations of objects, in loud speakers, detected by their effects on microphone diaphragm and the ear drum; sound waves are longitudinal.<br>• Auditory range of humans and animals.<br>• Pressure waves transferring energy; use for cleaning and physiotherapy by ultra-sound.<br>• Waves transferring information for conversion to electrical signals by microphone. |
| Earth & Space | • Gravity force, weight = mass x gravitational field strength (g), on Earth g=10 N/kg, different on other planets and stars; gravity forces between Earth and Moon, and between Earth and Sun (qualitative only).<br>• Our Sun as a star, other stars in our galaxy, other galaxies.<br>• The seasons and the Earth's tilt, day length at different times of year, in different hemispheres.<br>• The light year as a unit of astronomical distance. |
| Electricity | • Electric current, measured in amperes, in circuits, series and parallel circuits, currents add where branches meet and current as flow of charge.<br>• Potential difference, measured in volts, battery and bulb ratings; resistance, measured in ohms, as the ratio of potential difference (p.d.) to current.<br>• Differences in resistance between conducting and insulating components (quantitative).<br>• Static electricity. |
| Materials | • Chemical reactions as the rearrangement of atoms.<br>• Representing chemical reactions using formulae and using equations.<br>• Combustion, thermal decomposition, oxidation and displacement reactions.<br>• Defining acids and alkalis in terms of neutralisation reactions.<br>• The pH scale for measuring acidity/alkalinity; and indicators.<br>• The composition of the Earth.<br>• The structure of the Earth.<br>• The rock cycle and the formation of igneous, sedimentary and metamorphic rocks |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

## Skills Progression Map – Working Scientifically Skills

### Level Expected at the End of EYFS

A selection of the **most relevant** statements from Development Matters age ranges for Three and Four-Year-Olds and Reception as well as highlighting the statements within the ELGs **which feed into** the programme of study for Science.

| | | |
|---|---|---|
| Three- & Four-Year Olds | Personal, Social & Emotional Development | • Understand 'why' questions, like: "Why do you think the caterpillar got so fat?" |
| | Communication & Language | • Make healthy choices about food, drink, activity and toothbrushing. |
| | Understanding the World | • Use all their senses in hands-on exploration of natural materials.<br>• Explore collections of materials with similar and/or different properties.<br>• Talk about what they see, using a wide vocabulary.<br>• Begin to make sense of their own life-story and family's history.<br>• Explore how things work.<br>• Plant seeds and care for growing plants. |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | | |
|---|---|---|
| | | • Understand the key features of the life cycle of a plant and an animal.<br>• Begin to understand the need to respect and care for the natural environment and all living things.<br>• Explore and talk about different forces they can feel.<br>• Talk about the differences between materials and changes they notice. |

| | | |
|---|---|---|
| Reception | Communication & Language | • Learn new vocabulary.<br>• Ask questions to find out more and to check what has been said to them.<br>• Articulate their ideas and thoughts in well-formed sentences.<br>• Describe events in some detail.<br>• Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen.<br>• Use new vocabulary in different contexts. |
| | Personal, Social & Emotional Development | • Know and talk about the different factors that support their overall health and wellbeing:<br>- regular physical activity<br>- healthy eating<br>- toothbrushing<br>- sensible amounts of 'screen time'<br>- having a good sleep routine<br>- being a safe pedestrian |
| | Understanding the World | • Explore the natural world around them.<br>• Describe what they see, hear and feel while they are outside.<br>• Recognise some environments that are different to the one in which they live.<br>• Understand the effect of changing seasons on the natural world around them. |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | | | |
|---|---|---|---|
| ELG | Communication & Language | Listening, Attention & Understanding | • Make comments about what they have heard and ask questions to clarify their understanding. |
| | Personal, Social & Emotional Development | Managing Self | • Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices. |
| | Understanding the World | The Natural World | • Explore the natural world around them, making observations and drawing pictures of animals and plants.<br>• Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class.<br>• Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

## Key Stage 1 & 2

This curriculum progression map shows the progression of working scientifically skills from year 1 to year 6. Statements here are taken directly from the national curriculum.

| National Curriculum Working Scientifically | | |
|---|---|---|
| Key Stage 1 | Lower Key Stage 2 | Upper Key Stage 2 |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| During years 1 and 2, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content: | During years 3 and 4, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content: | During years 5 and 6, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content: |
|---|---|---|
| • asking simple questions and recognising that they can be answered in different ways;<br>• observing closely, using simple equipment;<br>• performing simple tests;<br>• identifying and classifying;<br>• using their observations and ideas to suggest answers to questions;<br>• gathering and recording data to help in answering questions. | • asking relevant questions and using different types of scientific enquiries to answer them;<br>• setting up simple practical enquiries, comparative and fair tests;<br>• making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers;<br>• gathering, recording, classifying and presenting data in a variety of ways to help in answering questions;<br>• recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables;<br>• reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions;<br>• using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions;<br>• identifying differences, similarities or changes related to simple scientific ideas and processes;<br>• using straightforward scientific evidence to answer questions or to support their findings. | • planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary;<br>• taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate;<br>• recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs;<br>• using test results to make predictions to set up further comparative and fair tests;<br>• reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations;<br>• identifying scientific evidence that has been used to support or refute ideas or arguments. |

## Progression of Vocabulary - Working Scientifically

| KS1 | LKS2 | UKS2 |
|---|---|---|
| aim | accurate | accuracy and precision |
| answers | bar chart | bar graphs |
| block diagrams | chart | causal relationship |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | | |
|---|---|---|
| changes | classify | degree of trust |
| compare | comparative test | dependent variable |
| describe | conclusion (What have we found out?) | independent variable |
| difference | criteria | justify |
| different | data | line graphs |
| enquiry | develop | refute |
| equipment | diagram | repeat results |
| experience | evaluate | scatter graphs |
| explore | evidence | support |
| findings | explanation | variables (what do we change, what do we keep the same, how and what are we measuring?) |
| gather | key | |
| group | making a test fair | |
| identify (name) | method | |
| investigate | observations | |
| measure | plan (What will we do?) | |
| notice | practical enquiry | |
| observe | prediction (What do you think will happen?) | |
| patterns | primary sources | |
| pictograms | questioning | |
| questions | reasoning | |
| record | relationships | |
| same | results (What happened?) | |
| similarity | secondary sources | |
| simple tables | standard units | |
| sort | table | |
| sorting diagrams | What do we change, what do we keep the same, what are we measuring? | |
| tally charts | | |
| test | | |
| What will we do? (plan) | | |
| What do you think will happen? (prediction) | | |
| What happened? (results) | | |
| What have we found out? (conclusion) | | |

| Plan | KS1 | LKS2 | UKS2 |
|---|---|---|---|

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | | | |
|---|---|---|---|
| Ask questions, make predictions, decide on the method and equipment. | **KS1 Science National Curriculum**<br>Asking simple questions and recognising that they can be answered in different ways.<br><br>Children can:<br>a explore the world around them, leading them to ask some simple scientific questions about how and why things happen;<br>b begin to recognise ways in which they might answer scientific questions;<br>c ask people questions and use simple secondary sources to find answers. | **Lower KS2 Science National Curriculum**<br>Asking relevant questions and using different types of scientific enquiries to answer them.<br><br>Children can:<br>a start to raise their own relevant questions about the world around them in response to a range of scientific experiences;<br>b start to make their own decisions about the most appropriate type of scientific enquiry they might use to answer questions;<br>c recognise when a fair test is necessary;<br>d help decide how to set up a fair test, making decisions about what observations to make, how long to make them for and the type of simple equipment that might be used. | **Upper KS2 Science National Curriculum**<br>Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.<br><br>Children can:<br>a with growing independence, raise their own relevant questions about the world around them in response to a range of scientific experiences;<br>b with increasing independence, make their own decisions about the most appropriate type of scientific enquiry they might use to answer questions;<br>c explore and talk about their ideas, raising different kinds of scientific questions;<br>d ask their own questions about scientific phenomena;<br>e select and plan the most appropriate type of scientific enquiry to use to answer scientific questions;<br>f make their own decisions about what observations to make, what measurements to use and how long to make them for, and whether to repeat them;<br>g plan, set up and carry out comparative and fair tests to answer questions, including recognising and controlling variables where necessary. |

| Do | KS1 | LSK2 | UKS2 |
|---|---|---|---|
| Carry out an enquiry using equipment. | **KS1 Science National Curriculum**<br>Observing closely, using simple equipment.<br><br>Performing simple tests.<br><br>Identifying and classifying. | **Lower KS2 Science National Curriculum**<br>Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. | **Upper KS2 Science National Curriculum**<br>Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.<br><br>Recording data and results of increasing complexity using scientific diagrams and |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | | | |
|---|---|---|---|
| | Children can:<br>a observe the natural and humanly-constructed world around them;<br>b observe changes over time;<br>c use simple measurements and equipment;<br>d make careful observations, sometimes using equipment to help them observe carefully;<br>e carry out simple practical tests, using simple equipment;<br>f experience different types of scientific enquiries, including practical activities;<br>g talk about the aim of scientific tests they are working on;<br>h use simple features to compare objects, materials and living things;<br>i decide how to sort and classify objects into simple groups with some help. | Setting up simple practical enquiries, comparative and fair tests.<br><br>Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions.<br><br>Children can:<br>a make systematic and careful observations;<br>b observe changes over time;<br>c use a range of equipment, including thermometers and data loggers;<br>d ask their own questions about what they observe;<br>e where appropriate, take accurate measurements using standard units using a range of equipment;<br>f set up and carry out simple comparative and fair tests;<br>g talk about criteria for grouping, sorting and classifying;<br>h group and classify things. | labels, classification keys, tables, scatter graphs, bar and line graphs.<br><br>Children can:<br>a choose the most appropriate equipment to make measurements and explain how to use it accurately;<br>b take measurements using a range of scientific equipment with increasing accuracy and precision;<br>c make careful and focused observations;<br>d know the importance of taking repeat readings and take repeat readings where appropriate;<br>e independently group, classify and describe living things and materials;<br>f use and develop keys and other information records to identify, classify and describe living things and materials. |

| Record | KS1 | LKS2 | UKS2 |
|---|---|---|---|
| Use drawing, tables or graphs to note observations and measurements. | **KS1 Science National Curriculum**<br>Gathering and recording data to help in answering questions.<br><br>Children can:<br>a record and communicate findings in a range of ways with support;<br>b sort, group, gather and record data in a variety of ways to help in answering questions, such as in simple sorting diagrams, pictograms, tally charts, block diagrams and simple tables. | **Lower KS2 Science National Curriculum**<br>Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions.<br>Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.<br><br>Children can:<br>a collect data from their own observations and measurements; | **Upper KS2 Science National Curriculum**<br>Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.<br><br>Children can:<br>a decide how to record data from a choice of familiar approaches;<br>b record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | | | |
|---|---|---|---|
| | | b present data in a variety of ways to help in answering questions;<br>c use, read and spell scientific vocabulary correctly and with confidence, using their growing word reading and spelling knowledge;<br>d record findings using scientific language, drawings, labelled diagrams, keys, bar charts and tables. | graphs, bar graphs and line graphs. |

| Review | KS1 | LKS2 | USK2 |
|---|---|---|---|
| Interpret, communicate and evaluate results. | **KS1 Science National Curriculum**<br>Using their observations and ideas to suggest answers to questions.<br><br>Children can:<br>a notice links between cause and effect with support;<br>b begin to notice patterns and relationships with support;<br>c begin to draw simple conclusions;<br>d identify and discuss differences between their results;<br>e use simple and scientific language;<br>f read and spell scientific vocabulary at a level consistent with their increasing word reading and spelling knowledge at key stage 1;<br>g talk about their findings to a variety of audiences in a variety of ways. | **Lower KS2 Science National Curriculum**<br>Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.<br><br>Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.<br><br>Identifying differences, similarities or changes related to simple scientific ideas and processes.<br><br>Using straightforward scientific evidence to answer questions or to support their findings.<br><br>Children can:<br>a draw simple conclusions from their results;<br>b make predictions;<br>c suggest improvements to investigations;<br>d raise further questions which could be investigated;<br>e first talk about, and then go on to write | **Upper KS2 Science National Curriculum**<br>Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations.<br><br>Using test results to make predictions to set up further comparative and fair tests.<br><br>Identifying scientific evidence that has been used to support or refute ideas or arguments.<br><br>Children can:<br>a notice patterns;<br>b draw conclusions based in their data and observations;<br>c use their scientific knowledge and understanding to explain their findings;<br>d read, spell and pronounce scientific vocabulary correctly;<br>e identify patterns that might be found in the natural environment;<br>f look for different causal relationships in their data;<br>g discuss the degree of trust they can have |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | | | |
|---|---|---|---|
| | | about, what they have found out;<br>f report and present their results and conclusions to others in written and oral forms with increasing confidence;<br>g make links between their own science results and other scientific evidence;<br>h identify similarities, differences, patterns and changes relating to simple scientific ideas and processes;<br>i use straightforward scientific evidence to answer questions or support their findings;<br>j recognise when and how secondary sources might help them to answer questions that cannot be answered through practical investigations. | in a set of results;<br>h independently report and present their conclusions to others in oral and written forms;<br>i use their test results to identify when further tests and observations may be needed;<br>j use test results to make predictions for further tests;<br>k use primary and secondary sources evidence to justify ideas;<br>l identify evidence that refutes or supports their ideas;<br>m recognise where secondary sources will be most useful to research ideas and begin to separate opinion from fact;<br>n use relevant scientific language and illustrations to discuss, communicate and justify their scientific ideas;<br>o talk about how scientific ideas have developed over time. |

## Enquiry Skills Progression

| | KS1 | LKS2 | UKS2 |
|---|---|---|---|
| Observing over Time | • Ask questions.<br>• Make careful observations.<br>• Use scientific language.<br>• Draw and label what you observe.<br>• Use equipment and take simple measurements.<br>• Create graphs and tables from your observations.<br>• Use observations to suggest answers to questions.<br>• Talk about and explain observations using scientific knowledge and understanding. | • Ask questions.<br>• Make careful observations.<br>• Use scientific language.<br>• Draw and label what you observe.<br>• Use equipment and take measurements accurately.<br>• Create graphs and tables from your observations.<br>• Use observations to suggest answers to questions.<br>• Draw simple conclusions from data.<br>• Ask questions about observations made. | • Make careful observations.<br>• Observe changes over different periods of time.<br>• Use scientific language.<br>• Draw and label what you observe.<br>• Use equipment and take measurements accurately.<br>• Create graphs and tables from your observations.<br>• Use observations to suggest answers to questions.<br>• Draw conclusions, suggesting answers to questions. |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | | | |
|---|---|---|---|
| | | • Think about the effect of changing the time and number of observations.<br>• Talk about and explain observations using scientific knowledge and understanding. | • Recognise relationships in results.<br>• Talk about and explain observations using scientific knowledge and understanding.<br>• Use results to make predictions for further tests. |

| | KS1 | LKS2 | UKS2 |
|---|---|---|---|
| Pattern Seeking | • Ask questions.<br>• Recognise when pattern seeking will help to answer questions.<br>• Use equipment accurately to collect observations.<br>• Notice simple relationships and links.<br>• Record data appropriately and accurately.<br>• Recognise simple patterns in results to draw conclusions. | • Ask questions.<br>• Recognise when pattern seeking will help to answer questions.<br>• Begin to make decisions about how data is collected and which equipment to use.<br>• Use equipment accurately to collect observations.<br>• Record data appropriately and accurately.<br>• Present data in ways such as bar charts and tables.<br>• Notice links and relationships.<br>• Recognise patterns in results to make conclusions. | • Recognise when variables cannot be controlled and when pattern seeking will help to answer questions.<br>• Make decisions about how data is collected and which equipment to use.<br>• Use equipment to make observations and accurate measurements.<br>• Record data appropriately and accurately.<br>• Present data in ways such as tables, scatter graphs, bar and line graphs.<br>• Recognise patterns in results.<br>• Notice links and causal relationships.<br>• Recognise the effect of sample size on reliability.<br>• Use findings to plan further tests from. |

| | KS1 | LKS2 | UKS2 |
|---|---|---|---|
| Identifying, Grouping & Classifying | • Ask questions.<br>• Recognise when identifying and classifying will be helpful to answer questions.<br>• Identify and group names and features of plants, animals and materials.<br>• Use secondary sources to identify and classify things.<br>• Use simple diagrams and tables | • Ask questions.<br>• Recognise when identifying and classifying will be helpful to answer questions.<br>• Use tests to sort and classify things.<br>• Discuss criteria and different ways of sorting things.<br>• Use secondary sources to identify and classify things. | • Recognise when identifying and classifying will be helpful to answer questions.<br>• Use tests to sort and classify things.<br>• Use secondary sources to identify and classify things.<br>• Make classification keys using specific characteristics of things.<br>• Use more than one source to identify and classify things. |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | | | |
|---|---|---|---|
| | to record groups.<br>• Look for similarities and make comparisons. | • Make simple classification keys.<br>• Use more than one source to identify and classify things.<br>• Look for similarities and differences. | • Use scientific knowledge and language to describe similarities and differences when comparing things. |

| | KS1 | LKS2 | UKS2 |
|---|---|---|---|
| Researching | • Ask questions.<br>• Recognise when research using secondary sources will help to answer questions.<br>• Decide which sources of information might answer questions.<br>• Use relevant information and data from a range of secondary sources.<br>• Present findings in suitable formats.<br>• Draw conclusions from research.<br>• Explain research using scientific knowledge and understanding. | • Ask questions.<br>• Recognise when research using secondary sources will help to answer questions.<br>• Decide which sources of information might answer questions.<br>• Use relevant information and data from a range of secondary sources.<br>• Recognise how data has been obtained.<br>• Present findings in suitable formats.<br>• Draw conclusions from research.<br>• Explain research using scientific knowledge and understanding.<br>• Use findings from research to raise further questions. | • Recognise when research using secondary sources will help to answer questions.<br>• Decide which sources of information might answer questions.<br>• Use relevant information and data from a range of secondary sources.<br>• Recognise how data has been obtained.<br>• Start to notice when information and data is biased or based on opinions rather than facts.<br>• Present findings in suitable formats.<br>• Draw conclusions from research.<br>• Explain research using scientific knowledge and understanding.<br>• Evaluate how well your research has answered your questions.<br>• Use findings from research to raise further questions. |

| | KS1 | LKS2 | UKS2 |
|---|---|---|---|
| Comparative & Fair Testing | • Ask questions and find different ways to answer them.<br>• Use scientific language.<br>• Use equipment to make observations and take measurements.<br>• Make careful observations.<br>• Gather, record and present data to help answer questions. | • Ask questions and find different ways to answer them.<br>• Set up simple tests, making decisions about what equipment you need and how you will record results.<br>• Use scientific language.<br>• Use scientific diagrams. | • Ask questions and find different ways to answer them.<br>• Use scientific language.<br>• Use scientific diagrams.<br>• Use equipment to measure accurately and to make careful observations.<br>• Control or change variables where necessary.<br>• Gather, record, present and group |

# Science Curriculum & Progression Overview 2025-26

**At St Andrew's CE Primary School, we aim to bring children to a place where they can realise their full potential. Our Christian values are the foundation of all we do and each one is a facet of the central value, love, which 'always protects, always trusts, always hopes, always perseveres' (1Corinthians 13:7).**

| | | | |
|---|---|---|---|
| | • Talk about findings.<br>• Make simple conclusions. | • Use equipment to measure accurately and to make careful observations.<br>• Gather, record, present and group data in different ways: tables, keys and charts.<br>• Present your findings.<br>• Draw simple conclusions and make predictions.<br>• Suggest improvements and raise further questions.<br>• Make simple conclusions. | data in different ways: tables, keys and charts.<br>• Make conclusions and recognise causal relationships.<br>• Take repeat readings.<br>• Use results to make predictions to plan further tests from.<br>• Recognise the degree of trust in results and, if needed, suggest improvements. |