Sparsholt C of E Primary School – Science Overview 2025-26

<table>
<tr><th></th><th>Autumn</th><th>Spring</th><th>Summer</th></tr>
<tr><td>Willow
Year R</td><td colspan="3">• Explore the natural world around them, making observations and drawing pictures of animals and plants;
• 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;
• Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.
See Y1/2 Curriculum. Year Rs are exposed to the scientific concepts being taught through participating in the practical elements at an age and stage appropriate level with their Year 1 cohort.</td></tr>
<tr><td>Longitudinal Study</td><td colspan="3">KQ: How does our school environment change throughout the seasons?
Working scientifically
Statutory requirements
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:
▪ asking simple questions and recognising that they can be answered in different ways
▪ observing closely, using simple equipment
▪ performing simple tests
▪ identifying and classifying
▪ using their observations and ideas to suggest answers to questions
▪ gathering and recording data to help in answering questions.</td></tr>
<tr><td>Beech
Year 1 and 2</td><td>Seasonal Changes
• observe changes across the four seasons
• observe and describe weather associated with the seasons and how day length varies.

Animals incl. Humans (Y1)
• identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals
• identify and name a variety of common animals that are carnivores, herbivores and omnivores
• describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)
Animals incl. Humans (Y2)
• identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.
• notice that animals, including humans, have offspring which grow into adults
• find out about and describe the basic needs of animals, including humans, for survival (water, food and air)
• describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</td><td>Everyday Materials (Y1)
• 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.

Use of Everyday Materials (Y2)
• identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses
• find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching

Living things and their Habitats
• describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food
Living things and their Habitats
• explore and compare the differences between things that are living, dead, and things that have never been alive
• 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</td><td>Plants
• identify and name a variety of plants and animals in their habitats, including microhabitats
• Plants
• observe and describe how seeds and bulbs grow into mature plants
• find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.

Seasonal Changes
• observe changes across the four seasons
• observe and describe weather associated with the seasons and how day length varies.</td></tr>
<tr><td>Longitudinal Study</td><td colspan="3">KQ: How do trees (and their environment) change throughout the year?
Working scientifically
Statutory requirements
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:
▪ asking simple questions and recognising that they can be answered in different ways
▪ observing closely, using simple equipment
▪ performing simple tests
▪ identifying and classifying
▪ using their observations and ideas to suggest answers to questions
▪ gathering and recording data to help in answering questions.</td></tr>
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	Autumn	Spring	Summer
Rowan Year 3 and 4	Sound • identify how sounds are made, associating some of them with something vibrating • recognise that vibrations from sounds travel through a medium to the ear • find patterns between the pitch of a sound and features of the object that produced it • find patterns between the volume of a sound and the strength of the vibrations that produced it • recognise that sounds get fainter as the distance from the sound source increases. States of Matter (Y4) • compare and group materials together, according to whether they are solids, liquids or gases • 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) • identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.	Electricity • identify common appliances that run on electricity • construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers • identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery • recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit • recognise some common conductors and insulators, and associate metals with being good conductors.	Living things and their habitats • recognise that living things can be grouped in a variety of ways • explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment • recognise that environments can change and that this can sometimes pose dangers to living things • describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird • describe the life process of reproduction in some plants and animals. Animals including humans • describe the simple functions of the basic parts of the digestive system in humans • identify the different types of teeth in humans and their simple functions • construct and interpret a variety of food chains, identifying producers, predators and prey. • describe the changes as humans develop to old age. • Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. • Describe the ways in which nutrients and water are transported within animals, including humans
Longitudinal Study	**KQ: If we make a pond and leave it, will it naturally develop like the school pond?** Working scientifically UKS2: • planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary • taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate • recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs • using test results to make predictions to set up further comparative and fair tests • reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations • identifying scientific evidence that has been used to support or refute ideas or arguments.		

Oak **Year 5 and 6**	**Light (Y6)** - recognise that light appears to travel in straight lines - 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 - 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 - use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them. - identify how sounds are made, associating some of them with something vibrating - recognise that vibrations from sounds travel through a medium to the ear - find patterns between the pitch of a sound and features of the object that produced it - find patterns between the volume of a sound and the strength of the vibrations that produced it - recognise that sounds get fainter as the distance from the sound source increases. **Electricity** - identify common appliances that run on electricity - construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers - identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery - recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit - recognise some common conductors and insulators, and associate metals with being good conductors. - associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit - 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 - use recognised symbols when representing a simple circuit in a diagram.	**Living Things and their habitats (Y6)** - describe how living things are classified into broad groups according to common - observable characteristics and based on similarities and differences, including microorganisms, plants and animals - give reasons for classifying plants and animals based on specific characteristics	**Evolution and Inheritance** - recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago - recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents - identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. **Animals including humans** - identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood - recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function - describe the ways in which nutrients and water are transported within animals, including humans.
Longitudinal Study	KQ: **Do we all start and end life in the same way? (Comparison of measurements across the year.)** Working scientifically UKS2: • planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary • taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate • recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs • using test results to make predictions to set up further comparative and fair tests • reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations • identifying scientific evidence that has been used to support or refute ideas or arguments.		