



(Science) Overview

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
EYFS	Animal adventures Exploring animals big and small on the school grounds and further afield, identifying similarities and differences and sorting animals into groups.		Animal adventures Exploring animals big and small on the school grounds and further afield, identifying similarities and differences and sorting animals into groups.			
Y1/2 (A)	Plants: Introduction to plants Venturing outside, children identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. They use magnifying glasses to observe and name plant parts and sort leaves into groups based on appearance. Pupils investigate if beans need water for growth and identify edible plant parts.	Forces, Earth and space: Seasonal Changes Reflecting on their own experiences, children learn about the four seasons and the weather associated with each. Pupils explore how seasonal changes affect trees, daylight hours and our choices about outfits. They plan and carry out their own weather reports, considering the knowledge required for this job.	Living things and their habitats: Habitats Considering the life processes that all living things have in common, pupils classify objects into alive, was once alive or has never been alive. Pupils explore global habitats, naming plants and animals that can be found there. They learn how a range of different living things depend on each other for food or shelter.	Animals, including humans: Life cycles and health Studying the life cycles of various animals, children learn what animals need to survive and how they change over time. Pupils collect data that allows them to observe changes in their peers, while also developing their ability to take measurements and record data. They consider how scientific knowledge helps people to make healthy choices.	Plants: Plant growth Carrying out comparative tests, pupils identify the conditions required for seed germination and compare these to the survival needs of plants in later growth phases. Pupils use rulers to measure stem growth and record data in a table. They use their results to conclude that plants need water, light and a suitable temperature to grow and stay healthy. Children identify the stages in a plant's life cycle and discover how humans impact plants in the environment.	Making connections Bringing together pupils' learning from multiple Science units, helping them to make connections between the key concepts and skills.

Y1/2 (B)	Animals: Sensitive bodies Identifying and naming body parts and conducting practical activities with the senses to spot patterns and answer questions	Materials: Everyday materials Identifying the difference between objects and materials, children explore their surroundings to find examples of each. They work scientifically by planning tests, making observations and recording data. Pupils use results to answer questions and sort and group materials based on their properties.	Animals, including humans: Comparing animals Studying both local and global animals, children recognise common characteristics and physical features. They use this information to make comparisons and classify animals. Pupils consider the most effective way to collect data about class pets and record their findings in a block chart	Materials: Uses of everyday materials Building on their knowledge of everyday materials and their properties, pupils recognise that materials are suited to specific purposes and explore how actions such as stretching and bending affect the shape of solid objects. They compare the suitability of materials; gather and record data in tables and block graphs and use their results to answer questions.	Living things and their habitats: Microhabitat Developing their understanding of scientific enquiry, pupils learn that scientists use a range of skills to answer questions. They discover that microhabitats provide what minibeasts need to survive and carry out a survey to find out where different minibeasts live in the school grounds. They	Making connections Bringing together pupils' learning from multiple Science units, helping them to make connections between the key concepts and skills.
Y3/4 (A)	Energy: Light and shadows Identifying examples of light sources, children learn that light is needed to see and how its absence causes darkness. Children investigate reflection and shadow formation and explore how shadows can be used to entertain in the arts, creating shadow puppets to recount how different people work or experiment with light.	Animals, including humans: Movement and nutrition Studying the human skeleton, children identify key bones and compare them to other animals explaining the role within the body. Pupils explore how changes in muscles result in movement and the implications these discoveries have in the scientific development of prosthetic limbs.	Materials: Rocks and soil Studying rocks and their properties, children learn how to classify rocks and identify how they were formed. They look at the work of palaeontologists to learn about fossil formation and use models to explore how fossils tell us about the past	Animals, including humans: Digestion and food Using models, children describe the function of key organs in the digestive system. Pupils identify the types of human teeth to create their own model and investigate factors that impact our dental health. They compare human teeth to other animals' and consider this in the light of prior knowledge about predators, prey and food chains.	Energy: Electricity and circuits Exploring appliances that use electricity in their setting, children learn how to work with electricity safely and build circuits. Pupils investigate electrical conductors and insulators and explore the relationship between the number of bulbs and bulb brightness.	Making connections Bringing together pupils' learning from multiple Science units, helping them to make connections between the key concepts and skills.
Y3/4 (B)	Forces and space: Forces and magnets By investigating motion on different surfaces, children learn about friction and compare its uses and disadvantages.	Materials: States of matter Investigating the properties of solids, liquids and gases, children learn about the different states of matter.	Energy: Sound and vibrations Exploring different ways of producing sounds, children learn about the relationship between vibrations and what they	Living things: Classification and changing habitats Identifying different ways to group living things, children make classification keys to	Plants: Plant reproduction Explaining how plants reproduce in the context of the life cycle of a flowering plant, gathering data on plant growth and investigating the structure	Making connections Bringing together pupils' learning from multiple Science units, helping them to make connections between the

	They broaden their experience in working scientifically as they investigate contact and non-contact forces. Pupils explore the properties of different magnets and apply this to understand their uses.	They explore changes of state using relatable examples and use this to explain changes to water through the water cycle. Pupils investigate the relationship between temperature and rate of evaporation while broadening their experience of working scientifically.	hear. They study dolphins and whales to develop their understanding of how sound travels between objects and investigate the role of insulation to protect our ears	explore which grouping methods are most effective. Pupils study ways habitats change over time and understand that humans can have both positive and negative effects on their surroundings.	and function of the parts of a flowering plant.	key concepts and skills
Y5/6 (A)	Animals, including humans: Circulation and health Studying the human circulatory system, children learn about the role of the heart, blood and blood vessels and use models to demonstrate their function. They explore how lifestyle choices affect our health and use secondary sources to advise patients.	Materials: Mixtures and separation Pupils explore different types of mixtures and the different methods that can be used to separate them. They dissolve a range of substances, identify different solutions and investigate how temperature affects the time taken to dissolve. They design and create a water filter, sieve soil and evaporate solutions.	Materials: Properties and changes Broadening their experience of the properties of materials, children investigate hardness, transparency and conductivity and consider how these properties influence the uses of materials. They explore reversible changes, including dissolving and changes of state.	Forces, Earth and space: Earth and space Exploring some of the key celestial bodies in our Solar System, children learn their names and compare their movements. Pupils discover the relationship between the Earth's rotation and daylight, making models to represent their knowledge. They make their own sundials and consider how and why humans' ideas about the universe have changed over time.	Energy: Light and reflection Proving that light travels in a straight line, children use this information to explain observations of reflection and shadows. They explore how our eyes allow us to see and how mirrors can be used in a variety of ways. Pupils investigate factors affecting the size of shadows and the laws of reflection.	Making connections Bringing together pupils' learning from multiple Science units, helping them to make connections between the key concepts and skills.
Y5/6 (B)	Living things: Life cycles and reproduction Comparing the life cycles of plants, mammals, birds, amphibians and insects. Investigating asexual reproduction in plants and comparing sexual and asexual reproduction	Forces, Earth and space: Unbalanced forces Building on their knowledge of forces, children explore gravity, air resistance and water resistance in more depth and consider the effect of these forces being unbalanced. They demonstrate key principles in the	Living things and their habitats: Classifying big and small Children broaden their knowledge of how vertebrates, invertebrates, plants and micro-organisms are grouped using shared characteristics. They discover how Carl Linnaeus developed the	Energy: Circuits, batteries and switches Using their prior knowledge of electrical circuits, children learn to draw conventional circuit diagrams and use models to explain current, resistance and voltage. They compare different batteries and consider the effect on bulb brightness.	Living things and their habitats: Evolution and inheritance Studying patterns in humans and other species, children learn about characteristics that are inherited from parents and those that are environmental. Through the eyes of Darwin and Wallace, pupils	Animals, including humans: Human timeline Studying human development and changes, children identify key stages and consider what data may help determine if a child is growing normally. They describe how puberty affects girls and boys and produce graphs to

		classroom and plan investigations to further their understanding of the effects of these forces.	Linnaean and binomial systems for classifying and naming living things.		understand how observations lead to theories and explore natural selection.	compare how gestation periods vary across different mammals, including humans.
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