

Year	Autumn	Spring	Summer
<h1>1</h1>	<p style="text-align: center;">Parts of Animals</p> <p>Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</p> <p>Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)</p> <p>Observing closely, using simple equipment</p> <p>Performing simple tests</p> <p>Identifying and classifying</p> <p style="text-align: center;">Changing Seasons</p> <p>Observe changes across the four seasons</p> <p>Observe and describe weather associated with the seasons and how day length varies.</p> <p>Observing closely, using simple equipment</p> <p>Using their observations and ideas to suggest answers to questions</p> <p>Gathering and recording data to help in answering questions.</p> <p>Asking simple questions and recognising that they can be answered in different ways</p>	<p style="text-align: center;">Identifying Animals</p> <p>Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals</p> <p>Identify and name a variety of common animals that are carnivores, herbivores and omnivores</p> <p>Observing closely, using simple equipment</p> <p>Identifying and classifying</p> <p>Gathering and recording data to help in answering questions.</p> <p style="text-align: center;">Identifying Materials</p> <p>Distinguish between an object and the material from which it is made</p> <p>Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</p> <p>Observing closely, using simple equipment</p> <p>Identifying and classifying</p> <p>Performing simple tests</p> <p>Asking simple questions and recognising that they can be answered in different ways</p> <p>Using their observations and ideas to suggest answers to questions</p> <p>Gathering and recording data to help in answering questions.</p>	<p style="text-align: center;">Plants</p> <p>Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees</p> <p>Identify and describe the basic structure of a variety of common flowering plants, including trees.</p> <p>Observing closely, using simple equipment</p> <p>Identifying and classifying</p> <p>Gathering and recording data to help in answering questions.</p>

		<p>Comparing Materials</p> <p>Describe the simple physical properties of a variety of everyday materials</p> <p>Compare and group together a variety of everyday materials on the basis of their simple physical properties.</p> <p>Asking simple questions and recognising that they can be answered in different ways</p> <p>Using their observations and ideas to suggest answers to questions</p> <p>Gathering and recording data to help in answering questions.</p> <p>Performing simple tests</p>	
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	<p style="text-align: center;">Animals need for survival</p> <p>Find out about and describe the basic needs of animals, including humans, for survival (water, food and air). Working scientifically – Asking simple questions and recognising that they can be answered in different ways</p> <p style="text-align: center;">Humans</p> <p>Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. Working scientifically – Gathering and recording data to help in answering questions. Performing simple tests Using their observations and ideas to suggest answers to questions Gathering and recording data to help in answering questions</p> <p style="text-align: center;">Uses of Materials</p> <p>Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses Identifying and classifying Asking simple questions and recognising that they can be answered in different ways Observing closely, using simple equipment</p>	<p style="text-align: center;">Living things and their habitats</p> <p>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 Identify and name a variety of plants and animals in their habitats, including micro-habitats Identifying and classifying Gathering and recording data to help in answering questions. Observing closely, using simple equipment Asking simple questions and recognising that they can be answered in different ways</p> <p style="text-align: center;">Growing Plants</p> <p>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. Observing closely, using simple equipment Asking simple questions and recognising that they can be answered in different ways Performing simple tests Using their observations and ideas to suggest answers to questions</p>	<p style="text-align: center;">Plants bulbs and seeds</p> <p>Observing what plants need to grow Make a plan and planting and observing</p> <p style="text-align: center;">Growing up</p> <p>Identify the mother and the offspring Describing the life cycle of humans Observing the cycles of different mammals, life cycle of amphibians Life cycle of a butterfly Observing if there are patterns between the life cycles of different animals.</p>
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	<p style="text-align: center;">Skeletons</p> <p>Name and identify bones in the human body. Describe what are the functions of the skeleton. Name and identify bones in a range of animals. Identify that humans and some other animals have skeletons and muscles for support, protection, and movement.</p> <p style="text-align: center;">Movement</p> <p>Identify two different joint types. Name and identify the hips, elbows, knees, and shoulder joints. Describe whether these are examples of hinge or ball and socket joints.</p> <p style="text-align: center;">Nutrition and diet</p> <p>Sort the food into five groups – fruit and vegetables, carbohydrates, protein, dairy (and alternatives) and fats and sugars. Explain that a variety of different foods are needed for a balanced diet. Describe the importance of eating the right amount of food. Compare the diets based on their similarities and differences. Name and identify a range of animals and state whether they are carnivores, herbivores or omnivores. Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make</p>	<p style="text-align: center;">Soils</p> <p>Describe the importance of the soil. Recognize that soils are made from rocks and organic matter. Gather, record, classify and present data in a variety of ways to help answer questions.</p> <p style="text-align: center;">Light</p> <p>Recognize that they need light in order to see things and that dark is the absence of light. Notice that light is reflected from surfaces. Recognize that light from the sun can be dangerous and that there are ways to protect their eyes. Recognize that shadows are formed when the light from a light source is blocked by an opaque object. Find patterns in the way that the size of shadows change. Asking relevant questions and using different types of scientific enquiries to answer them.</p> <p style="text-align: center;">Plants</p> <p>Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. Investigate the way in which water is transported within plants. Explore the part that flowers play in the life cycle of flowering plants, including</p>	<p style="text-align: center;">Magnets and Forces</p> <p>Compare how things move on different surfaces. Notice that some forces need contact between two objects, but magnetic forces can act at a distance. Describe magnets as having two poles. Predict whether two magnets will attract or repel each other, depending on which poles are facing. Observe how magnets attract or repel each other and attract some materials and not others. 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. Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions. Using results to draw simple conclusions, make predictions for new values, suggest improvements, and raise further questions. Using straightforward scientific evidence to answer questions or to support their findings.</p>
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	<p>their own food; they get nutrition from what they eat</p> <p style="text-align: center;">Food waste</p> <p>Describe what is a food waste and what are the impacts of food waste on the planet. Identify simple ways of reducing food waste in school and at home.</p> <p style="text-align: center;">Rocks and Fossils</p> <p>Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. Describe in simple terms how fossils are formed when things that have lived are trapped within rock. Recognize that soils are made from rocks and organic matter. Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers Setting up simple practical enquiries, comparative and fair tests.</p>	<p>pollination, seed formation and seed dispersal. 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. Recording findings using simple scientific language, drawings, labeled diagrams, keys, bar charts, and tables. Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.</p>	<p>Identifying differences, similarities or changes related to simple scientific ideas and processes. Asking relevant questions and using different types of scientific enquiries to answer them</p>
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	<p>Group and Classify Living Things Learn to identify, sort and group animals into categories based on their features Understand that each animal group has different physical features Understand what is a vertebrate and an invertebrate Find out about closed questions and create closed questions that can be answered with either “yes” or “no”. Use classification keys to classify plants and animals based on simple physical characteristics 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</p> <p>States of Matter Compare and group materials together, according to whether they are solids, liquids or gasses 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 Making systematic and careful observations and, where appropriate, taking accurate measurements using</p>	<p>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 Explore sound further and investigate vibrations and how sound travels</p> <p>Electricity Identify common appliances that run on electricity 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</p>	<p>Habitats Observe local habitats and record living things they see around them Find out how human activity affects habitats</p> <p>Deforestation Understand what deforestation is Find out what are the impacts of deforestation in the UK and around the world</p> <p>The Digestive System Learn the parts of the human digestive system 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 Learn about the first stage of the digestive system, consider why our teeth are different shapes and have different functions</p> <p>Food Chains Understand what is a food chain Interpret food chains and discuss the impact of changes to a chain Learn how to draw food chain construct and interpret a variety of food chains, identifying producers, predators and prey</p>
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	<p>standard units, using a range of equipment, including thermometers</p>	<p>Understand electricity and the dangers it poses</p> <p>Energy</p> <p>What is energy How can we reduce our energy usage</p>	
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UKS2

	<p>Living Things and Their Habitats explore conditions for life and the differences between living and non-living things understand the criteria for living and non-living things, so they are then able to group organisms or objects group and classify animals and plants based on their characteristics describe what bacteria, viruses and fungi look like and what diseases or infections they may cause Classifying microorganisms should be based on features such as shape</p> <p>Space Describe the Sun, Earth and Moon as approximately spherical bodies Describe the movement of the Earth and other planets relative to the Sun in the Solar System. use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky Describe the movement of the Moon relative to the Earth</p> <p>Global Warming Understand what global warming is Find out what is the impact of global warming on living things</p>	<p>Light 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 Investigate shadows and how they change as a result of light source Investigate how light reflects Find out what light pollution is How can we reduce light pollution</p> <p>Animals Including Humans Describe the changes as humans develop to old age Understand the human life cycle Find out about adolescence and puberty Adults and the elderly Gestation period of mammals and lifespan</p> <p>Life Cycles Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird</p>	<p>Variations Learn about variations Find out about characteristics Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents Identify things that are inherited and things that are learned</p> <p>Adaptations Understand how plants and animals adapt Find out about natural selection Identify features that support survival in a given environment Learn how have plants and animals evolved over time to adapt to their environments</p> <p>Fossils Fossil formation and Comparing fossils Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago explore the role of fossils in scientific understanding of evolution</p>
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		<p>Describe the life process of reproduction in some plants and animals</p> <p>Research and sketch mammalian and bird life cycles for comparison</p> <p>Compare the lifecycles of mammals, amphibians, insects and birds</p>	
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	<p style="text-align: center;">Cells</p> <p>find out about the parts of a plant cell, and what they do use a microscope to look at plant cells Find out how animal cells differ from plant cells Learn specialised cells and their functions and how their structure helps them carry out their functions Find out about tissues, organs and organs and organs systems in living things Recognise and name human organs that are part of different organ systems</p> <p style="text-align: center;">Materials and their structures</p> <p>sort the states of matter into solids, liquids and gasses. learn about the properties of solids, liquids and gasses.. Learn what happens when matter changes state Investigate the temperature increase when you heat water. Learn about the water cycle Learn what an atom and an element are Learn about the periodic table</p> <p style="text-align: center;">Forces and Energy</p> <p>Understand that the force of gravity acts between objects learn about what affects the strength of the force of gravity of an object practice using correct terms 'weight' and 'mass'.</p>	<p style="text-align: center;">Grouping and identifying organisms</p> <p>think about what makes living organisms different from non-living things learn about the seven characteristics of living organisms. Learn the structure of a virus and how they multiply Learn how to describe a species and to compare it. Learn to use dichotomous keys and classify organisms</p> <p style="text-align: center;">Properties of materials</p> <p>List the properties of metals and non-metals Learn about the uses of metals and non-metals Compare the properties of metals and non metals. Investigate materials</p> <p style="text-align: center;">Earth Physics</p> <p>Understand how vibrations make sound Learn how sound waves reflect learn the layers of Earth and understand continental drift with tectonic plates. learn how to explain how mountains, volcanoes and earthquakes form. learn how solar and lunar eclipses happen.</p>	<p style="text-align: center;">Changes to material</p> <p>learn about chemical and physical properties of matter. know how to make a neutral solution and its importance in our life. find out how to create a hypothesis and plan an investigation. learn how to identify a chemical reaction.</p> <p style="text-align: center;">Electricity</p> <p>learn how electricity flows around a circuit. learn the symbols of circuit components. learn the unit and symbol of current, and how to represent it in a circuit. discover the difference between electrical conductors and insulators. learn how adding or removing different components can affect the current in a series circuit.</p>
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	<p>Learn how scientists think the Solar System was formed</p> <p>Learn about what keeps the planets in orbit around the sun</p> <p>Understand why planets move at different speed</p> <p>Discover why objects moving in space don't as they do on Earth</p> <p>Learn about tidal forces</p> <p>Discover how tidal forces affect the oceans and the land</p> <p>Learn about different energy stores and transfers</p> <p>Discover energy changes</p> <p>Learn how to distinguish between useful and wasted energy</p>	<p>Micro-organisms in the environment</p> <p>learn different kinds of microorganisms.</p> <p>practise constructing food chains & webs and to classify the organisms.</p> <p>learn what decomposers are.</p> <p>learn the important role of decomposers in food webs.</p>	
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	<p style="text-align: center;">Respiration</p> <p>Learn the names of the different parts of the human respiratory system Find out how oxygen goes into your blood from the air and how carbon dioxide goes in the other direction Learn about structure and functions of blood</p> <p style="text-align: center;">Properties of Materials</p> <p>Correctly use the scientific terms associated with dissolving Investigate the properties of solutions Compare the solubility of various solutions Use paper chromatography Interpret chromatograms</p> <p style="text-align: center;">Forces and Energy</p> <p>Understand what is meant by balanced and unbalanced forces Describe the effects of balanced and unbalanced forces on motion Understand what is meant by speed Learn about the unit of speed Be able to calculate speed Learn how to use graphs to describe movement Draw distance/time graph Recognise when a force causes something to turn Recognise that forces can apply pressures on area Understand how particles moves in liquid and gases Diffusion in liquids and gases</p>	<p style="text-align: center;">Ecosystems</p> <p>Learn what an ecosystem is and about ecosystems on Earth Think about how animals and plants interact with each other Describe some of the different habitats in an ecosystem How new or invasive species can affect an ecosystem Learn what bioaccumulation is and why it happens</p> <p style="text-align: center;">Materials and Cycles on Earth</p> <p>Describe the structure of an atom List the particles found in an atom and describe the properties Difference between weather and climate, observe weather Learn about how Earth's climate has changed Ice ages, glacial and interglacial periods Atmosphere on Earth and how atmosphere change can affect the climate</p> <p style="text-align: center;">Light</p> <p>Reflection and refraction of light How white light is made of many colours Discover what happens when colours of light are added or subtracted Discover why we see different colours Find out that the galaxies contain dust, gas, stars and other solar systems Asteroids-definitions and how do they form</p>	<p style="text-align: center;">Chemical Reactions</p> <p>Exothermic and endothermic reactions Describe the reactions of some metals with oxygen and water</p> <p style="text-align: center;">Magnetism</p> <p>Describe a magnetic field and how magnetic fields interact Discover that the Earth has a magnetic field Core of the Earth acts as a magnet How electromagnets are made Recall some applications of electromagnets Factors that affect the strength of an electromagnet</p>
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		<p style="text-align: center;">Diet and Growth</p> <p>Learn about the six types of nutrient that everyone needs to eat and some good sources of nutrient</p> <p>What is meant by a balanced diet</p> <p>How growth takes place and difference between growth and development</p> <p>Learn how smoking affects your health</p> <p>What affects and helps growth and development</p>	
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