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| **Science Topic Overview** | | | | | | | | | |
| **Year group** | **Autumn** | | | **Spring** | | | **Summer** | | |
| **Reception**  **Seasonal changes runs through all year** | **Animals incl humans**  Children are supported to identify and name simple body parts.  Explore the senses of sight, touch, sound, smell and taste and identify which part of their body they use. | **Materials**  Changes in materials- heating/baking  Text – Leaf Man  Children to collect natural resources such as leaves, sticks and conkers. | | **Living things and their habitats**  Animals in diff habitats such as jungle, Arctic | | **Materials**  Changing materials- making porridge (The three Bears and the magic porridge pot).  Properties of materials-. building bridges, and houses (The Three Billy Goats Gruff and The Three Little Pigs). | **Living things and their habitats**  Naming minibeasts found in outdoor area  Life cycle of a butterfly | **Plants**  Watching seeds grow | |
| **Materials-**  Floating and sinking  Waterproof materials  Sorting materials | |
| **Materials**  Freezing and melting. Explore materials such as sand, mud, corn flour when they are wet and dry. | |
| Plants  Planting and watching seeds grow |
| **Plants**  fruit and vegetables and are encouraged to think about size, shape, colour and simple features when comparing them. | **Plants**  Identify sycamore, horse chestnut, oak and pine trees by their seeds and leaves., | |  |
| **Animals, including Humans**  What does hibernation mean? | |
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| **Materials** I can talk about change and why things happen: making bread: Making Bread and apple sauce. |
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| **Year 1&2 Cycle A**  **Seasonal changes runs through all year** | **Animals inc humans**  Senses  Parts of the human body  Using our senses | | **Animals incl Humans**  How to stay healthy  Diff types of food  Keeping clean  Take Care | **Materials**  Is all paper the same?  Is all fabric the same?  Can the same object be made from different materials?  Can it bend/stretch?  Everyday Materials | | | **Plants**  naming parts of a plant  What is the same/different about flowers?  Identifying plants and trees  What makes a tree a tree.  Plant Detectives | | **Plants**  Planting seeds, what do seeds need to grow  Life cycle of a seed  The apprentice gardener |
| **Year 1&2 Cycle B**  **Seasonal changes runs through all year** | **Living Things and Habitats**  Dead or alive  Food chains  What is in your habitat? | | **Materials**  What is the object made of?  Which material is good for…..  Mending holes in buckets, building building for toy cars  Good Choices | **Materials**  Identify and name  Change shape  Shaping Up | **Animals inc humans**  identify and name animals including fish, amphibians,    Carnivores, herbivores and omnivores  Structure of animals  Looking at Animals | | **Animals inc humans**  Growing up  -changes to the human body  Basic needs to survive  Growing Up | | **Plants**  What flowers do we find in diff seasons  How do leaves change over time  Do all trees lose their leaves?  Our Changing World |
| **Year 3&4 Cycle A**  **Living things and their habitats runs through all year** | **Materials**  Melting and boiling  Evaporation  Changes of state- chocolate melting  In a State | | | **Sound**  How sounds are made/how they travel  Making a sound louder  Moving away from sound  Good Vibrations | **Electricity**  Making circuits  Using switches and bulbs  Conductors and insulators  Switched On! | | **Animals inc Humans**  Digestive system  Teeth  Food chains  Where does all that food go? | | **Living Things**  Grouping living things- vertebrates and invertebrates  Using keys  Environmental change  Who Am I? |
| **Year 3&4 Cycle B**  **Living things and their habitats runs through all year** | **Rocks and soil**  Different types of rock  How is soil made  Fossils  Rock Detectives | | **Forces and magnets**  What is making it move  How can it start to move  What materials are magnetic  How do magnet affect each other  The Power of Forces | **Animals inc Humans**  Skeleton  muscles  Healthy food  Amazing Bodies | **Light**  What do we need to see  What do mirrors do  shadows  Can you see me? | | **Plants**  Functions of diff parts  Transfer of water  Seed dispersal  How does your garden grow? | | |
| **Year 5&6 Cycle A** | **Earth in space**  What is in space  How long is a year/day  Why do we have seasons  Why does the moon change space  The Earth beyond | | **Materials**  -compare and group materials  Are liquids runny  Are all solids hard  Are all metals the same  Are all plastics the same  Get sorted | **Forces**  Measuring forces  Why does an object fall  How can we slow down a moving object  Levers  Feel the force | **Animals inc Humans**  Changes as humans grow old  Cycle of life | | **Living Things and Habitats**  How do flowering plants reproduce  How do amphibians, birds, mammals and insects reproduce  Reproduction in plants and animals | | **Materials**  Mixing  Dissolving  separating  Marvelous mixtures |
| **Year 5&6 Cycle B** | **Evolution and inheritance**  How do living things vary  How does natural selection work  How do living things survive  Everything changes | | **Light**  How does light travel  Shadows  Light up your world | **Animals inc Humans**  Circulatory system  Blood  The heart  Transportation of water and nutrients around the body  Body pump | **Electricity**  Circuits  Circuit diagrams  Resistance  Danger- low voltage | | **Living Things and Habitats**  - classification  How are vertebrates/ invertebrates grouped  What else is living apart from plants and animals  Micro-organisms  Nature Library | | **Animals inc Humans**  Being healthy  Healthy snacks  Exercise  Drugs  Smoking  Body Health |

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|  | **EYFS** | **Year 1&2** | **Year 3&4** | **Year 5&6** |
| **Disciplinary knowledge**  **Working Scientifically** | 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. | 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. | 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:  ● asking relevant questions and using different types of  scientific enquiries to answer them  ● setting up simple practical enquiries, comparative and fair  tests 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  ● recording findings using simple scientific language,  drawings, labelled diagrams, keys, bar charts, and tables  ● reporting on findings from enquiries, including oral and  written explanations, displays or presentations of results  and conclusions | 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:  ● 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 |