**Science Curriculum**

**Year 1**

**EYFS**

* Explore the natural world around them.
* Make drawings of animals and plants.

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| **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| **Unit Title: Parts of animals.**  Year 1 Autumn 1 Ourselves Topic | **Unit Title: Changing seasons.**  4 seasons clipart - Google Search | Apple season, Tree images, Seasons | **Unit Title: Identifying materials.**  Free Material Cliparts, Download Free Material Cliparts png images, Free  ClipArts on Clipart Library | **Unit Title: Comparing materials.** | **Unit Title: Plants**  Flower Clipart Vector Images (over 28,000) | **Unit Title: Types of animals**  Giraffe Clipart Black And White, Giraffe Face Clipart, - Giraffe Eating  Leaves Clipart, HD Png Download - kindpng |
| **Prior experience:**   * Use all of the senses in hands on exploration. | **Prior experience:**   * Describe what they see, hear and feel outside. * Understand some important processes and changes in the natural world, including the seasons. | **Prior experience:**   * Use all senses in hands on exploration of natural materials. * Explore collections of materials with similar/ different properties. * Talk about the differences between materials and changes they notice. | **Prior experience:**  (From Y1 Spring 1)   * Distinguish between an object and the material from which it is made * Identify and name a variety of everyday materials, including | **Prior experience:**   * Explore the natural world around them. * Plant seeds and care for growing plants. * Make drawings of animals and plants. * Understand the key features of the life-cycle of a plant. * Knowledge of seasonal changes and weather. | **Prior experience:**   * Explore the natural world around them. * Make drawings of animals and plants. * Identify and name a variety of common animals. * We must take care of animals when observing and return them safely. |
| **Prior Vocabulary:**  Some names of body parts (EYFS). | **Prior Vocabulary:**  Months of the year.  Seasons (EYFS). | **Prior Vocabulary:**  Link to senses vocabulary. | **Prior Vocabulary:**   * Object * Material * Plastic, wood, metal, water, glass, brick, fabric, paper, rock. * Liquid * Powder | **Prior Vocabulary:**  Link to Seasonal change in Autumn 2.  Link to previous learning – growth and change (EYFS). | **Prior Vocabulary:**  Basic body parts  Animal names |
| **Skills:**   * Can I Identify, name, draw and label the basic parts of the human body? * Can I match the sense to the body part? * Can I consider how scientists helps us to learn about the world? | **Skills:**   * Can I describe the seasonal changes I observe? * Can I take simple measurements? * Can I make predictions? * Can I measure rainfall using a rain gauge? * Can I observe wind direction? * Can I record the weather in different ways? | **Skills:**   * Can I group objects made with the same materials? * Can I describe similarities and differences between materials using my senses? * Can I explore different liquids? * Can I explore different powders? | **Skills:**   * Can I describe materials using my senses? * Can I predict which materials would be best for a particular purpose? * Can I explore different materials and their properties? | **Skills:**   * Can I plant a seed and observe it grow? * Can I observe, describe and compare different plants? * Can I draw and label a plant? * Can I name and compare different parts of plants? * Can I Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees? | **Skills:**   * Can I think of ways that humans and animals keep healthy and safe? * Can I complete a bar chart? * Can I observe the differences in different animal teeth? * Can I predict an animal diet by looking at their teeth? * Can I classify animals in different ways? * Can I plan a zoo? |
| **NC Knowledge:**   * Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. * Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) | **NC Knowledge:**   * Observe changes across the four seasons * Observe and describe weather associated with the seasons and how day length varies. | **NC Knowledge:**   * 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 | **NC Knowledge:**   * 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. | **NC Knowledge:**   * Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees * Identify and describe the basic structure of a variety of common flowering plants, including trees. | **NC Knowledge:**   * 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. |
| **NC Scientific enquiry:**   * Observing closely, using simple equipment * Performing simple tests * Identifying and classifying. | **NC Scientific enquiry:**   * Observing closely, using simple equipment * Using their observations and ideas to suggest answers to questions * Gathering and recording data to help in answering questions. * Asking simple questions and recognising that they can be answered in different ways. | **NC Scientific enquiry:**   * Observing closely, using simple equipment * Identifying and classifying * Performing simple tests * Asking simple questions and recognising that they can be answered in different ways * Using their observations and ideas to suggest answers to questions * Gathering and recording data to help in answering questions. | **NC Scientific enquiry:**   * Observing closely, using simple equipment * Identifying and classifying * Asking simple questions and recognising that they can be answered in different ways * Using their observations and ideas to suggest answers to questions * Gathering and recording data to help in answering questions. * Performing simple tests. | **NC Scientific enquiry:**   * Observing closely, using simple equipment * Identifying and classifying * Gathering and recording data to help in answering questions. | **NC Scientific enquiry:**   * Observing closely, using simple equipment * Identifying and classifying * Gathering and recording data to help in answering questions. |
| **Knowledge break down:**   * To know that we are called humans. * To know that humans have five senses. * To know the names of common body parts. * To know the names of animal body parts. * To know which part of the body is associated with each sense. * To know similarities and differences between human and animal body parts. | **Knowledge break down:**   * To know that there are four seasons; autumn, winter, spring and summer. * To know that in autumn the weather begins to get colder and the leaves fall from the trees. * To know that in winter the weather is much colder. * To know that in spring the weather starts to get warmer. Trees and plants begin to grow. * To know that in summer the weather gets hotter. * To know that the amount of daylight changes with each season. | **Knowledge break down:**   * To know that objects are made from materials. * To know that some objects are made from more than one material. * To know that some materials are liquids. * To know that some materials are powders. | **Knowledge break down:**   * To know that different materials have different properties. * To know that materials are chosen based on their properties. | **Knowledge break down:**   * To know that plants are living things. * To know that a wild seed grows where it falls. * To know that garden plants are plants that people chose to grow in their gardens. * To know that a deciduous tree loses its leaves each year. * To know that an evergreen tree keeps green leaves all year round. | **Knowledge break down:**   * Identify and name a variety of common animals. * To know that animals in zoos usually come from different parts of the world and are usually found in the wild. * To know that animals have different structures. * To know that a carnivore mostly eats meat. * To know that a herbivore eats only plants. * To know that an omnivore eats plants and meat. * To know that diet is what animals eat to survive. * To know that George Mottershead was the founder of Chester Zoo. |
| **Key moments in curriculum books:**   * Draw main parts of human body. * Label main parts of the body. * Match body part to sense. * Senses investigation photographs.. | **Key moments in curriculum books:**   * Photographs of seasonal walks. * Notes/ picture observations. * Weather investigation | **Key moments in curriculum books:**   * Photographs of exploring different materials. * Lists of suitable and unsuitable materials. | **Key moments in curriculum books:**   * Photographs of exploring different materials. * Lists of suitable and unsuitable properties. | **Key moments in curriculum books:**   * Photographs of planting and caring for seeds. * Labelled diagram of a plant. * Photographs of outdoor investigations. | **Key moments in curriculum books:**   * Photographs of sorting activities. * Bar chart of favourite pets. * Visitor guide to their zoo. |
| **Text links:**  Super Duper You | **Text links:**  Tree – Britta Teckentrup  Tap Tap Boom Boom – Elizabeth Bluemle  Storm – Sam Usher | **Text links:**  The three Little Pigs. | **Text links:**  The three Little Wolves and the Big Bad Pig. | **Text links:**  A Seed is Sleepy – Dianna Hutts Aston  It Starts with a Seed - Laura Knowles | **Text links:**  Who Eats What? Stephanie Babin  Non-fiction animal books.  Animals All Around eBook. |
| **Key Vocabulary:**   * Basic body parts – hair, nose, ear, eye, neck, chest, wrist, hand, knee, foot, head, eyebrow, mouth, chin, shoulder, elbow, arm, stomach, leg, ankle. * Animal body parts – tail, trunk, wing, fin, scales, claw, paw * Five senses – touch, see, hear, smell, taste. * Human | **Key Vocabulary:**   * Autumn, Winter, Spring, Summer * Season * Daylight hours * Weather * Weather types * Rainfall * Wind direction | **Key Vocabulary:**   * Object * Material * Plastic, wood, metal, water, glass, brick, fabric, paper, rock. * Liquid * Powder | **Key Vocabulary:**   * Properties - Hard, soft, stretchy, shiny, dull, rough, smooth, bendy, waterproof, not waterproof, transparent, opaque | **Key Vocabulary:**   * Plant, Grow, * Parts of a plant; seed, root, stem, leaf, * Tree, Evergreen, Deciduous, trunk * Plant, wild, garden, fruit, vegetable, * Common tree names * Common plant/ flower names | **Key Vocabulary:**  Fish  Birds  Reptiles  Amphibians  Mammals  Carnivore  Herbivore  Omnivore  Diet  Teeth |
| **Scientist**  Linda Brown Buck | **Scientist**  Christopher Wren and Robert Hooke – the rain gauge | **Scientist** | **Scientist**  Ole Kirk-Christiansen | **Scientist** | **Scientist**  George Mottershead |
| **Curriculum links:**  DT – fruit salads.  PSHE – keeping healthy. | **Curriculum links:**  Maths – measure.  Geography – maps, weather symbols.  Art – Seasonal changes. | **Curriculum links:**  Computing links to sorting and grouping. | **Curriculum links:** | **Curriculum links:** | **Curriculum links:**  English – The Last Wolf.  DT – Structures; make an animal home. |