**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.
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| **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 partsAnimal 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?
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| **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.
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| **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.
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| **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.
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| **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.
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|  **Text links:**Super Duper You | **Text links:**Tree – Britta TeckentrupTap Tap Boom Boom – Elizabeth BluemleStorm – 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 BabinNon-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:**FishBirdsReptilesAmphibians Mammals CarnivoreHerbivoreOmnivoreDietTeeth |
| **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.  |