

Ryhope Infant School Academy

Progression of Science Skills

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| **Area of Study** | **Nursery/Reception**  **(Range 6 – ELG)** | **Year 1** | **Year 2** |
| **Plants** | **Plants:**  Plant seeds and observe growth over time  **Trees:**  Show an awareness of how trees change throughout the seasons, including those that do not (evergreen)  Know that some trees grow flowers and fruits, but some do not. | **Plants:**  Identify and name a variety of common plants and trees (wild and garden)  Name the parts of a plant: root, stem, flower, leaf, seed, bulb  **Trees:**  Recognise deciduous and evergreen trees  Name parts of a tree: roots, trunk, branches, leaves, flowers or fruit. | Understand what seeds need in order to grow: water, light, suitable temperature  Observe and describe how bulbs grow into mature plants |
| **Animals including humans** | **Animals:**  Compare and sort things that are living and non-living  Identify and name some common animals (pets, insects, farm animals, wild animals, ocean animals)  Show a basic understanding of what common animals need to survive  **Humans:**  Name the basic parts of the human body: Head, arms, hands, legs, feet, eyes, nose, mouth, ears, teeth, knees, elbows.  Develop an understanding of healthy and unhealthy food and the need for a varied diet.  Observes the effect of exercise on their bodies. | **Animals:**  Identify and name a variety of common animals, including fish, amphibians, reptiles, birds and mammals.  Classify these animals based on whether they are carnivores, herbivores or omnivores (using this terminology)  Compare the bodies of different animals  **Humans:**  Name the parts of the human body: *(Those parts taught in EYFS plus the following)*  neck, wrists, ankles, fingers, toes, hips, chest.  Label the basic parts of the human body  Identify which part of the body is linked to each of the five senses  Develop an understanding of the need for a varied diet, sleep and exercise in order to remain healthy | **Animals:**  Understand the basic needs of animals and humans for survival: food, water, air  Explain that animals, including humans, grow and reproduce  Explain why animals and humans have offspring that grow into adults  Describe the life cycle of some living things  Explain why a balanced diet, exercise, sleep and hygiene are important for human health. |
| **Everyday Materials** | Describe a range of common materials in their play using words such as: hard, soft, bendy, stiff | Distinguish between an object and the material it is made from  Identify and name some common everyday materials, including: wood, plastic, glass, metal, water and rock.  Describe a variety of materials using their senses, using appropriate scientific vocabulary eg. Rough, smooth, stretchy, strong, dull, shiny.  Sort materials based on their properties  Explain why some materials might be useful for a specific job. | Identify and name some common everyday materials, including: wood, plastic, glass, metal, brick, rock, paper and cardboard  Describe a variety of materials using their senses, using appropriate scientific vocabulary eg: absorbent, non-absorbent, water-proof, water- resistant, transparent, non-transparent, magnetic, non-magnetic, malleable.  Explain and compare why certain materials are suitable for particular uses.  Find out how some solid objects can be changed through a process for example: bending, twisting, heating and cooling. |
| **Living Things and their Habitats** | Know that some animals can be kept as pets while others cannot.  Sort animals by where they live: farm, zoo, in the wild, under the sea.  Show an awareness of why an animals home is a good place for them to live. |  | Explain the differences between things which are living, dead and non-living (as in ‘have never been alive’)  Match certain living things to the habitats they are found in  Identify and name a variety of plants and animals in their habitats  Describe how and why particular habitats are well suited to the animals or plants that live there, considering food sources, shelter, temperature.  Explain how animals get their food from plants and other animals using a basic food chain and correct terminology (producer, primary consumer, secondary consumer, tertiary consumer, decomposer) |
| **Seasonal Changes** | Observe and talk about changes across the seasons  Represent some of these changes in play and through art work. | Explain changes that occur across the four seasons:  Weather  Plants and trees  Animal behaviour – hibernation, migration  Human behaviour - Dressing appropriately  Understand how the length of daylight changes across the various seasons |  |