Year 1: Spring: Animals Our Learning Leaves Curriculum – Science

	Required prior knowledge	Knowledge to be explicitly taught	How knowledge will be built upon
Substantive knowledge	Explore the natural world around them, making observations and drawing pictures of animals and plants – YR Humans – identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense - Year 1 Autumn	• Animals are different to plants because they move around, rather than stay in the same place • Animals can be placed into different groups (c**arnivores, herbivores,** and **omnivore**s) based on the food they eat. • Animals have different features, including fins, wings, scales, legs, feathers, claws and paws etc. • Animals can be grouped into **fish, amphibians, reptiles, birds and mammals** (name common examples)	• Animals, including humans, need food to survive • Animals, including humans, need water and oxygen to survive • Animals, including humans, the right temperature to survive (Year 2) • Everything in the world can be categorised as either **alive**, used to be alive or has never been alive. • Living things are called **organisms.** • Living things grow, need air and **nutrients,** react to their surroundings, move, get rid of their **waste, reproduce (MRS GREN).** • Animals move from place to place, while plants move on the spot. • **Habitats** are the places where living things live, a very small habitat is called a **micro-habitat**, these can be found in larger habitats. • Animals and plants in a habitat depend on each other e.g. for food or shelter. • Animals get their food from plants and other animals, this is food provides the **energy** animals need. • Most plants produce their own food and are called **producers**. • In a **food chain,** the arrows show where the energy is being transferred from and to. • Living things are **adapted** to their **environment**. This means they may not be able to survive in other habitats. • Some animals and plants have adapted to life in a **hot desert: camels and cacti**. Some animals and plants have adapted to life in a **cold desert**: **Arctic fox and shrubs**. (Year 2)

Year 1: Spring: Animals

Our Learning Leaves Curriculum – Science

Disciplinary knowledge	Gather information from texts/books/images (Y1 Autumn)	• Research different animals and use images and text to classify the animals as herbivores, carnivores, or omnivores, and based on their physical characteristics • **Research using secondary sources** • **Identifying, classifying and grouping** - Use a Venn diagram to classify items into two or three sets based on properties	• Examine microhabitats using a magnifying glass and counting the number and type of living organisms found in the area. • Identify and name a variety of plants and animals in their habitats, including microhabitats • Identifying and classifying - How would you group these plants and animals based on what habitat you would find them in? • Find information from secondary sources Pattern seeking Which habitat do worms prefer – where can we find the most worms? What conditions do woodlice prefer to live in? (Year 2)

Year 1: Spring: Animals Our Learning Leaves Curriculum – Science

Key Drivers

Culture and Diversity - which helps pupils to develop enquiring minds about the wider world –

- Different habitats around the world, How are animals adapted for their environments.
- Scientists' values and beliefs are influenced by the larger culture in which they live. Such personal views can, in turn, influence. Expose the children to human diversity related to race, culture, ability, gender and relationship preferences.
- Scientists' values and beliefs are influenced by the larger culture in which they live. Such personal views can, in turn, influence the questions they choose to pursue and how they investigate those questions.
- PSTT – 'A Scientist Just Like Me' - https://pstt.org.uk/resources/curriculum-materials/ASJLM Case studies of different scientists from diverse and under-represented backgrounds.

Environment and Community - which helps to instil in our pupils a respect for our environment and for our local and wider communities

- Outside speakers
- Climate change
- British Science week
- Living Eggs
- Eco School
- School community reminders
- RESPECT characters reminders
- Children to appreciate our communities values, similarities and our unique qualities that make us special.

Creative arts and physical development - which helps our pupils to express themselves and excel as holistic learners.

- Scientists have to use their imagination to come up with explanations, theories and predictions.
- Scientists have to use their prior and new knowledge to create links

Learning to learn - which helps pupils to concentrate and focus and build resilience as learners –

- Identifying and classifying, Using secondary resources
- Respect characters model learning behaviours to develop resilience and perseverance.
- Respect characters model excellence in attitudes to learning.