**Year 1 Science Curriculum – Summer Term 1**

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| **Theme: Animals (vertebrates)** | | | | | | | | | | |
| **Curriculum objectives** | | | **Vocabulary** | | | | | | **Links across the curriculum** | |
| 1. To identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. 2. To identify and name a variety of common animals that are carnivores, herbivores and omnivores. 3. To describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). 4. To identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. | | | **Keyword** | **Definition** | **fish** | Animal that lives in water and has gills and fins | | | | **English:**  **Cats** – Claire Llewellyn/Andrew Beckett – Compare pet cats with wild cats, pointing out the features common to both.  **The Pond** – Isobel Thomas – Introduces the various creatures in a typical pond: frogs, snails, dragonflies, pond-skaters, fish and birds.  **Reptiles Break Rules** – Claire Llewellyn/Martin Sanders – discover the three-eyed reptile, the reptile that can grow a new tail and the reptile that can walk o water in this fascinating non-fiction book. | |
| **Feature** | Something that makes a thing special or different | **mammal** | An animal that is covered in hair or fur. The female gives birth to live young and feeds her babies on milk from her own body | | | |
| **Structure** | The way that the parts of something are joined together | **herbivore** | An animal that only eats plants | | | |
| **Adult** | Grown up animal | **omnivore** | An animal that eats both plants and animals | | | |
| **amphibian** | Animal, that lives in water or on land but must return to the water to reproduce | **reptile** | An animal which has dry, scale skin and lays eggs on land | | | |
| **carnivore** | An animal that only eats other animals | **vertebrate** | An animal that has an internal backbone | | | |
| **diet** | The kind of food an animal usually eats | **classify** | To group objects according to similarities in appearance or properties | | | |
| **group**  **(verb)** | To place objects, materials or living things into sets | **birds** | Animals that has features and lays eggs with hard shells | | | |
| **identify** | To place objects, materials or living things into sets. |  |  | | | |
| **Prior knowledge:***What specifically have pupils learned that is relevant to this unit that they are building upon?* | | | | | | | **Future knowledge:** *What specifically will pupils learn in the future that is relevant to this unit?* | | | |
| Animals is a biology topic building on children’s early experiences in Foundation Stage.  Children have previously learnt:   * To explore the natural world around them, making observations and drawing pictures of animals (EYFS framework; ELG The Natural World). | | | | | | | This prepares children for later learning:   * Identifying and naming animals in their habitats (Year 2 Biology – Living things and their habitats) * Classifying vertebrates and invertebrates (Year 4 Biology – Living things and their habitats). | | | |
| **Lesson Sequence** | | **Key Knowledge** | | | | | **Key Skills** | | | |
| 1. ***Who's who in the animal (vertebrate) world?*** | | There are five vertebrate groups in the animal kingdom: mammals, amphibians, reptiles, birds and fish. Reptiles are one of these, and the things that make them distinct are: eggs, claws, teeth, scaly skin and living on land. | | | | | **Working scientifically**  Skills children will learn, use, and develop   * Observing closely [using simple equipment]. * Identifying and classifying.   **Knowledge about science children will learn:**  They will develop an understanding of the following types of enquiry: identifying and classifying and observing over time.  They will learn that scientists build explanations about the natural world by making observations and collecting, analysing, and interpreting data to test their ideas, and that they identify links, patterns, and relationships. | | | |
| 1. ***What's so special about birds?*** | | Birds are vertebrates and the things that make them distinct are: eggs, beaks, claws, wings and feathers. | | | | |
| 1. ***What makes an amphibian an amphibian?*** | | Amphibians are vertebrates and the things that make them distinct are: eggs, living on land and in water and their diet changing with their stage of life. | | | | |
| 1. ***Do fish have fingers?*** | | Fish are vertebrates and the things that make them distinct are: they lay eggs, they have gills to help them breathe underwater, they have fins and a tail to help them swim, and most fish have scales to protect them. | | | | |
| 1. ***Are humans mammals?*** | | Mammals are vertebrates and humans are mammals too. The things that make mammals distinct are: hair or fur covering their bodies, giving birth to live young, producing milk for offspring, nurturing offspring, looking like a younger version of their parent and having a range of movement.  All vertebrates are either mammals, amphibians, reptiles, birds, or fish, but what they eat crosses those groupings. Carnivores, herbivores, and omnivores are another way of grouping animals.  Children may be interested in animals that are not vertebrates and these interests should be valued. The focus in Year 1 is on vertebrate groups. Other animals, including invertebrates, are addressed in subsequent year groups. | | | | |
| 1. ***Assessment*** | | Snapshot 2: Who eats what?  Curriculum statement is achieved if the child: Can match at least two animals to each set correctly and name them. | | | | |
| **Themes and links** | | | | | | | | | | |
| **Themes (types of enquiry)** | **Where these are covered:** | | | | | | | **Links across the Science curriculum** | | |
| **Observing closely (using simple equipment)** | Lessons 1, 2, 3, 4 and 5  Can describe observations using sensory and context-specific vocabulary (colour, size, roughness, number of legs, etc.)  Can make observations using all their senses (as appropriate to the task). | | | | | | | |  |  | | --- | --- | | EYFS | To explore the natural world around them, making observations and drawing pictures of animals (EYFS framework; ELG The Natural World). | | 1 |  | | 2 | To notice that animals, including humans, have offspring which grow into adults.  To find out about and describe the basic needs of animals, including humans, for survival (water, food, and air).  To describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. | | 3 | To identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat.  To identify that humans and some other animals have skeletons and muscles for support, protection, and movement. | | 4 | To recognise that living things can be grouped in a variety of ways.  To explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. | | 5 | To describe the differences in the life cycles of a mammal, an amphibian, an insect, and a bird.  To describe the life process of reproduction in some plants and animals. | | 6 | To describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants, and animals.  To give reasons for classifying plants and animals based on specific characteristics. | | | |
| **Gathering and recording data to help in answering questions** | Lesson 5  Can use simple scientific language to describe their observations. | | | | | | |
| **Comparative and fair testing** | Lessons 1, 2, 3, 4 and 5  Can describe common, observable features of at least five animals and compare the structure of two from different groups; this should be based on animals they are familiar with and that you would expect them to be able to talk about based on the learning in this module. | | | | | | |
| **Identifying and classifying** | Lessons 1, 2, 3, 4 and 5  Can match at least two animals to each set correctly and name them; this should be based on animals they are familiar with and that you would expect them to be able to talk about based on the learning in this module. | | | | | | |