# Ashtree Primary School and Nursery Medium Term Plan for Science

# Year 1/2 Autumn Term – Animals including Humans Unit – Different Animals

#### Prior Knowledge - EYFS

Development Matters 2020 - Reception - Understanding the World

Talk about members of their immediate family and community.

Name and describe people who are familiar to them.

#### Personal, Social and Emotional Development

See themselves as a valuable individual.

Manage their own needs.

#### **Physical Development**

Know and talk about the different factors that support their overall health and wellbeing: regular physical activity; healthy eating; toothbrushing; sensible amounts of 'screen time'; having a good sleep routine; being a safe pedestrian.

**Prior Skills – EYFS -** Classification - Sort images of people according to their characteristics. Researching using secondary sources - Find out information from visitors (dentist, nurse etc.). Pattern seeking - Are taller children faster? Are taller children stronger?

Key Vocabulary Body parts: eyes, ears, elbows, hair, mouth, nose, teeth, paw, hoof, tail, fin, shell, skin, wings, beak, fur, scales, feather Fish: goldfish, tuna, salmon, Birds: blackbird, magpie, robin, sparrow, crow, swan. Reptiles: snake, lizard, tortoise Mammals: mouse, horse, cow, sheep, hamster, rabbit Amphibians: frog, toad, newt Senses: feel, hear, smell, see, taste, touch, Carnivore, omnivore, herbivore Baby, toddler, adult, eggs, fruit, vegetables, water, fibre, meat, fish, cheese, beans, washing, exercise, diet, offspring

#### Key Knowledge - Year 1 Year 2

Step 1 - identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals, make observations of animals

Step 2 - know that animals eat different types of food, identify the food of some common animals

Step 3 - recall and use the words: carnivore, herbivore and omnivore

Step 4 - describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)

Step 5 - recognise that animals produce young

Step 6 - recognise changes that take place as animals get older and explain that adult animals no longer grow

Step 7 - describe some differences they observe between babies and toddler and make comparisons of the differences they observe between babies and toddlers

Step 8 - identify the offspring of a selection of different animals

Step 9 - name and locate the basic parts of the human body, draw and label a simple body

Step 10 - identify and locate the sense organs

Step 11 - use senses to describe textures, sounds and smells, compare differences in texture, sounds and smells

Step 12 - recognise that exercise is important

Step 13 - name some types of food and identify some types of food that make up their diet and name some examples of each

Step 14 - recognise that an adequate diet and exercise are necessary for them to grow and stay healthy and describe some of the types of food that they eat

## Key Skills - Year 1 Year 2

Step 1 - with support, uses their observations and ideas to suggest answers to

Step 2 - with support, uses their observations and ideas to suggest answers to

Step 3 - observes closely (including changes over time), using simple equipment

Step 4 - uses simple observable features to compare 2 objects, materials or living things

Step 5 - Can choose and use simple secondary sources to find answers, e.g. books, videos, photographs or people

Step 6 - talks about their findings with increasing confidence, using everyday terms, text scaffolds or simple scientific language

Step 7 - with some support, notices changes (i.e. cause and effect), patterns and relationships (i.e. how one variable affects another)

Step 8 - identifies and classifies (decides how to sort and group objects)

Step 9 - with help, records their findings in a range of ways, e.g., pictograms, sorting circles, and templates

Step 10 - talks about their findings using everyday terms, text scaffolds or simple scientific language

Step 11 - with support talks about what they have found out and how they found it out

Step 12 - about their findings with increasing confidence, using everyday terms, text scaffolds or simple scientific language

Step 13 - gathers and records simple data to help in answering questions e.g tables

Step 14 - talks about their findings with increasing confidence, using everyday terms, text scaffolds or simple scientific language

#### **Curriculum Enhancements**

- Visit a local zoo
- Visit a pet shop
- Taste and smell quizzes
- Children to bring in pictures of pets
- Pet shop/Vets role play area



## **Suggested Activities**

- S1 Sort and label different animals maybe relate to pets
- S2 Bring in a variety of foods which animals would eat this?
- S3 Sort animals into groups according to what they eat. Label the groups carnivore, herbivore, omnivore.
- S4 Sort animals according to features e.g. scales, fur, wings etc
- S5 Match the baby animals to their parents.
- S6 Timeline/Life Cycle of an animal.
- S7 Identify differences between a baby and a toddler. Show in a table
- S8 Look at a range of offspring which animal is its parent? How do you know
- S9 Use the skeleton or large diagram to introduce the names of parts of the human body.
- S10 How do humans smell, hear, taste, see, feel? What parts of our bodies enable us to do this?
- S11 Have a senses quiz where children have to describe the smell, taste, feel, sound of an object.
- S12 What is exercise? What different exercise do you do? Why do we exercise? Create our own exercise routine. What things are we including? Why?
- S13 Sort food into different groups.
- S14 Sort foods and lifestyle into healthy and unhealthy.

## **Possible Misconceptions**

Some children may think:

- only four-legged mammals, such as pets, are animals
- humans are not animals
- insects are not animals
- all 'bugs' or 'creepy crawlies', such as spiders, are part of the insect group
- amphibians and reptiles are the same.
- all animals that live in the sea are fish
- respiration is breathing
- breathing is respiration.

### **Future Knowledge**

In year 3 the children will be learning –

**Step 1** - identify some foods needed for a healthy and varied (balanced) diet

name the components of a healthy and varied diet - carbohydrates, protein, fats, fibre, fruit and vegetables

describe how their diet is balanced

- describe an adequate and varied diet for humans, recognising that there are many ways of achieving this
- **Step 2** know they have bones and muscles in their body state that they and other animals have skeletons
- **Step 3** identify animals that <u>do not</u> have <u>an internal skeleton</u> (<u>invertebrates</u>)

group animals with and without an internal skeleton

**Step 4** - describe some observable characteristics of bones

· recognise that their skeletons grow as they grow

**Step 5** - describe the main functions of their skeletons

• state that movement depends on both skeleton and muscles

Step 6 state that when one muscle contracts another relaxes