Ashtree Primary School and Nursery Medium Term Plan for Science

Year 1/2 Autumn Term – Animals including Humans Unit – Growth and Survival

Prior Knowledge - EYFS

<u>Development Matters 2020 - Reception - Understanding the World</u>

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.

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

Key Vocabulary

Baby, toddler, adult, eggs, fruit, vegetables, water, fibre, meat, fish, cheese, beans, washing, exercise, diet, offspring

Key Knowledge

- Step 1 recognise that animals produce young
- Step 2 recognise changes that take place as animals get older and explain that adult animals no longer grow
- Step 3 describe some differences they observe between babies and toddler and make comparisons of the differences they observe between babies and toddlers
- Step 4 identify the offspring of a selection of different animals
- Step 5 recognise that exercise is important
- Step 6 name some types of food and identify some types of food that make up their diet and name some examples of each
- Step 7 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 –

- Step 1 Can choose and use simple secondary sources to find answers, e.g. books, videos, photographs or people
- Step 2 talks about their findings with increasing confidence, using everyday terms, text scaffolds or simple scientific language
- Step 3 with some support, notices changes (i.e. cause and effect), patterns and relationships (i.e. how one variable affects another)
- Step 4 **identifies and classifies** (decides how to sort and group objects)
- Step 5 about their findings with increasing confidence, using everyday terms, text scaffolds or simple scientific language
- $\label{eq:condition} \mbox{Step 6 gathers and records simple data to help in answering questions e.g tables}$
- Step 7 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 Match the baby animals to their parents.
- S2 Timeline/Life Cycle of an animal.
- S3 Identify differences between a baby and a toddler. Show in a table
- S4 Look at a range of offspring which animal is its parent? How do you know
- S5 What is exercise? What different exercise do you do? Why do we exercise? Create our own exercise routine. What things are we including? Why?
- S6 Sort food into different groups.
- S7 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