Science Project Overview Year 1 Animals Including humans Term 1 and 2

Subject Knowledge (PoS) Substantive Knowledge

- Fish, amphibians, reptiles, birds and mammals are varieties of common animals.
- Carnivores, herbivores and omnivores are types of common animals.
- There are different groups of animals. These groups are fish, amphibians, reptiles, birds and mammals, including pets.
- The human body has a head, legs, arms, a body.
- The human face has hair, eyes, a nose, ears, a chin and a forehead.
- There are five senses including smell, sight, sound, touch and taste. (Yr1).

Working Scientifically (PoS+Overview) Disciplinary Knowledge

- Be curious and ask questions
- Using different types of scientific enquiry to answer their own questions, including: observing changes over a period of time, noticing patterns, grouping and classifying things, carrying out simple comparative tests, and finding things out using secondary sources
- Asking simple questions and recognising that they can be answered in different ways
- Observing closely, using simple equipment
- Performing simple tests
- · Identifying and classifying
- Using their observations and ideas to suggest answers to questions
- Begin to use simple scientific language to talk about what they have found out and communicate their ideas to a range of audiences in a variety of ways.

Working Scientifically Methods (Must be done)

Using different types of scientific enquiry to answer their own questions, including:

- observing changes over a period of time,
- noticing patterns,
- grouping and classifying things,
- carrying out simple comparative tests, and finding things out using secondary sources

Previous learning:

From Development Matters Reception Recognise some similarities and differences between life in this country and life in other countries.

Explore the natural world around them. Describe what they see, hear and feel whilst outside.

Recognise some environments that are different from the one in which they live.

Understand the effect of changing seasons on the natural world around them.

Preparing for:

- Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals. (Y6 - Living things and their habitats)
- Give reasons for classifying plants and animals based on specific characteristics. (Y6 - Living things and their habitats)
- Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. (Y5 - Living things and their habitats)
- Describe the life process of reproduction in some plants and animals. (Y5 Living things and their habitats)
- Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and

Bespoke to our school:

We are supplementing the limited experiences children have of the natural world around them through practical handson experiences. We are taking advantage of the woodland thatwe have in the school setting and our trained forest school staff to give our children opportunities to learn outdoors.

- identify and name different sources of food. (Y2 Living things and their habitats)
- Give reasons for classifying plants and animals based on specific characteristics. (Y6 - Living things and their habitats)
- 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. (Y3 -Animals, including humans)
- Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. (Y5 - Living things and their habitats)
- Describe the life process of reproduction in some plants and animals. (Y5 - Living things and their habitats)
 Recognise the impact of diet, exercise, drugs and lifestyle on

Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. (Y6 - Animals, including humans)

Vocabulary:

Head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves

Names of animals experienced first-hand from each vertebrate group

Parts of the body including those linked to PSHE/SRE teaching Senses – touch, see, smell, taste, hear, fingers (skin), eyes, nose, ear and tongue

Misconceptions:

- 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.

English Links:

Poetry – link to senses

Books:

Superworm

RSPB: My first book of garden birds

Me and my amazing body

Maths links:

Measurement: Solve practical problems for length and height; mass/weight; capacity and volume

Use measuring skills to record lengths and heights; mass/weight; capacity and volume;

Use appropriate language to sequence events in a chronological order

Famous Scientists to possibly study:

David Attenborough (1926 -) http://www.davidattenborough.co.uk/biography/

Explorify links:

Prehistoric shapes

Hot-steppers

Say cheese

Spooky animals

Bird feeders

Special delivery

Prehistoric shapes

Baby animals

Hot-steppers

How would you make a shelter for a human?

What if humans hibernated?

What if my bones were bendy?

What if we couldn't smell things?

Possible careers/jobs:

Farmer (grows crops and raises animals for food)

Marine biologist (studies living things in oceans)

Veterinarian/Vet (looks after unwell animals) Wildlife filmmaker (creates films and documentaries about wildlife) Wildlife photographer (takes pictures of animals

and plants)

Doctor (works to keep people healthy and cure disease)

Nurse (cares for patients and has a broad spectrum of responsibilities)

Optician (a doctor specialising in vision and eye health)