Medium Term Planning for Year 1 Science Autumn 2 – Animals

National Curriculum Objectives

- identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals
- identify and name a variety of common animals that are carnivores, herbivores and omnivores
- describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets- amphibians summer 2)

Working Scientifically :

- Ask simple questions and recognise they can be answered in different way
- Observing closely, using simple equipment
- Performing simple tests
- Identifying and classifying
- Using observations and ideas to suggest answers to questions
- Gathering and recording data to help in answering questions

Vocabulary for this unit

Adaption	Carnivore	Differences
Habitat	Omnivore	Beak
Animal	Vertebrate	Gill
Mammal	Invertebrate	Wing
Reptile	Predator	Shell
Bird	Hunter	Tail
Skin	Food chain	Scale
Fur	Similarities	blubber
Feathers		
Herbivore		

Science KS1 Key Concepts

1. **Life**
2. **Matter**
3. **Habitats**
4. **Being scientific**

SLC / Mediated Learning and re-cap on prior knowledge

- ✓ Get chd to discuss their ideas and thoughts.
- ✓ Use TfW style warm ups to get them using scientific vocabulary.
- ✓ Can they verbalise their observations?
- ✓ Can they ask scientific questions and create riddles!

Additional cross curricular /Literacy links

1. Write a report on polar bears and Arctic foxes
2. Create a fictional animals – paying attention to its physical description, food and habitat
3. Geography – Cold places – Arctic / Antarctic – conditions and adaptions for the environment they live

Key questions

What animal types do we know already?
Can we name 5 … birds, fish, mammal, reptiles?
Can we name 5 … carnivores, herbivores, omnivores?
Can you name 5 invertebrates, vertebrates?
What is a life cycle?
What is adaption?
What is a habitat?
What is a food chain
Geography re-cap – Where is the Arctic / Antarctic, what would you find there?

Resources needed

http://www.oneworldoneocean.com/blog/entry/the-school-polar-bear-adaptations-for-extreme-cold
http://www.bbc.co.uk/education/clips/zcrvr82
(polar bear adaption)
http://www.bbc.co.uk/education/clips/z2x2tfr
(polar bear habitat)
ICT:
Lap tops - Google Images of animals
https://www.bbc.co.uk/iplayer/episode/b00zjlq5/frozen-planet-1-to-the-ends-of-the-earth - introduction to topic for a couple of minutes
http://emperor-penguin.com/penguin-lifecycle.html - life cycle

Weaving Knowledge and Skills

Can they point out some of the differences between different animals?
Can they identify and name a variety of common animals? (birds, fish, amphibians, reptiles, mammals, invertebrates)
Can they describe how an animal is suited to its environment?
Can they identify and name a variety of common animals that are carnivores, herbivores and omnivores?
Can they say why certain animals have certain characteristics?
Can they name a range of wild animals? Can they name the parts of an animal's body?
Can they name a range of domestic animals?
Can they classify animals by what they eat? (carnivore, herbivore, omnivore)
Can they compare the bodies of different animals?

	LO	Teaching input	Independent/Application	SLC opportunities
1	To name and sort a range of animals based on key characteristics	Introduction to topic – What do we already know? Classifying Powerpoint – Discuss any questions raised – talk about where these animals are from Invertebrates / Vertebrates – What's the difference can we identify and name?	I can sort a range of animals based on observation of similar features. – Mammal / fish / bird / reptile	Use descriptive vocab to explain the key features

	✓ Mammal ✓ Bird ✓ Fish ✓ Reptile Can they name there 4 different types of the above animal types?	Talk partners Matching images with animal names – naming wild, domestic, woodland animals Riddle …What am I? <u>Animals 1:</u> – Classify common animals: Using response partners get chd to brainstorm different animals including pets – any animals, talk about these animals in terms of where they live, what they eat, what they have on their body, how they move etc. Can they use key vocabulary to describe their feet i.e. trotters, hooves etc. Play a couple of rounds of Animal Riddles – with A3 laminated copies – discuss Show chd a range of animal cards (mammals, fish, birds, reptiles). Have 4 hoops on the floor and allow chd to sort them into the specific above criteria – get them to verbalise their choices using reasons why they have made their selection. Study the selections made – discuss their body coverings in terms of feathers, skin, scales etc…	Using the prepared sheet cut the animals out and sort them based on similarities and differences – using a given criteria	of different animals based on their appearance
2	Can sort animals by body covering i.e. Feathers, scales and fur etc Can name the parts of different animals bodies. Compare the bodies of different animals	Animals 2: identify and observe Re-cap last session ✓ can name the parts of different animals bodies ✓ compare the bodies of different animals ✓ can name some differences in the animals Warm up: Reveal slowly the picture of a fish – can they guess what the animal is from small parts of it's body. TfW Activity – Tell me more … What can you tell about fish? Children discuss all they know and things they might want to know for us to research at a later time. IWB: Show chd the range of animals (criteria not based on mammal, fish, bird or reptile), How would they group these animals (own criteria)? – based on number of legs, habitat (farm, woodland Africa), colour, size etc …. Can they name the animal itself, discuss their body parts and pick out similarities and differences Can they discuss what the animals are covered with? .(scales / skin / fur / hair)	I can draw 4 different types of animal and label its body parts. Select any 2 / 4 animals from the main teaching activity and look carefully at its features - label its parts. Discuss with a friend where they would find it and what else they may want to find out about it.	Can they use appropriate vocabulary to name parts of the animals and describe where they might live based on their key characteristics
3	Can describe how animal is suited to its environment Compare the bodies of different animals	<u>Animals 3 – Adaption to their environment</u> Re-cap last session https://www.bbc.co.uk/iplayer/episode/b00zjlq5/frozen-planet-1-to-the-ends-of-the-earth - Introduce regions Introduce the Arctic as a 'habitat' for a group of animals – mainly mammals – looking at the land animals. What makes a mammal a mammal? <u>TfW Activity</u>: Show children the book – ask them to brainstorm some questions with response partner we may want to find out from this Book ('Hiding in the Polar Regions' by D. Underwood) i.e What animals live in the polar regions? • How have the animals adapted to their environment? (see above website)	I can choose an Arctic mammal (or more than one) and draw it in detail and label its parts paying close attention to its adaption i.e thick white fur, large paws, thick layer of blubber etc… – draw it in its natural habitat. Which parts have adapted to suit the conditions? Extension: More able to write a sentence about which parts of its body	Discuss what they have drawn and written in full sentences.

		Show chd PowerPoint of Arctic animals / Antarctic Animals IWB – Arctic Animals - discuss features in common	has been adapted to live in these conditions.	
4	To identify and name a variety of common animals that are carnivores, herbivores and omnivores	Animals 3 – Food Chain – what they eat Scientific Vocabulary: Carnivore, Herbivore and Omnivore Intro: Re-cap last lesson • Why do many of theses animals have camouflage? • How do the different animals move around their habitat? • What do the animals eat to stay alive? • Who is at the top of the food chain? Real life footage / animals in action – Frozen planet http://www.bbc.co.uk/programmes/p00l4qkz - "Equally Matched" shows a seal trying to catch a penguin (predator and prey, shows how they move in water and on land) – NB: Penguin gets away!!!! http://www.bbc.co.uk/programmes/p00l70jv "Hunters on the look out" – Killer whales preying on penguins – don't catch http://www.bbc.co.uk/programmes/p00l7rvd - killer whale and minke whale http://www.bbc.co.uk/programmes/p00lwcmn - polar bear feed on dead whale http://www.bbc.co.uk/programmes/p00l7sgp - krill 'Bottom of food chain	I can identify animals which eat meat, plants and both Select an Arctic animal which is an omnivore, carnivore and herbivore Draw the animal and draw its food. To be able to talk about their work and whether their animal is a meat eater / plant eater or both.	
5	To understand that all living things have a life-cycle	L.O Animals 4 – Life cycle of a penguin / found in Antarctic ('A Penguins Life' by N. Dickman) Can you think of any other birds that don't fly? Discus the difference between mammals and birds/reptiles that come from eggs. http://www.bbc.co.uk/programmes/b00zj35r http://emperor-penguin.com/penguin-lifecycle.html https://www.youtube.com/watch?v=lPXwa7MF-GI Also see in file: PowerPoint of Life cycle / Emperor Penguin Fact file .	ALL: I can order the life cycle of the penguin #HA – to include greater details i.e. some mention of timescales MA/LA – to illustrate and label (by outcome)	
6	Application of knowledge	LO: To create a new species of animal using the body parts and key vocabulary learnt so far. (Wild Animals by Sophie Corrigan) • Type of animal: Land / air / sea – mammal, fish, bird, reptile? • What it eats: Herbivore, Carnivore, or Omnivore? • Habitat: Has it had to adapt to live in its environment? https://www.youtube.com/watch?v=ZdsKSR30XHI	I can design my own creature using the knowledge I have learned so far and compile a fact file! Focus: use of key vocabulary Challenge: to use a wide range of animal parts – reptile/mammal/bird/fish and body coverings.	
	Enrichment Assessment	School trip to Yorkshire Wildlife Park – focus on animal type (bird, mammal, reptile, fish), covering and place in food chain – omnivore, herbivore and carnivore. Also recap on Arctic animals – Polar bears Science Assessment based on their knowledge of animals so far – revisited in the summer term for focus on amphibians.	I can identify and name a range of animals based on their animal type / covering / habitat / place in the food chain / herbivore, carnivore or omnivore.	