Imagine, Believe, Achieve

Springdale First School

Year 1 / Science / Animals including humans

Children's prior learning in this area	Cultural Capital Opportunities	Key vocabulary and glossary
Explore the natural world around them, making observations and drawing pictures of animals and plants. Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class.	Animal workshop/ Visit to zoo/Show and tell of pets at home. 	common animal names skin covering fur scales teeth tail paw /hoof/foot Insect / fish / bird human sense sight hearing touch taste smell common body part names carnivore, herbivore, omnivore

Enquiry Question How can we group animals?	**Enquiry Question** How are animals the same and different?	**Enquiry Question** Do all animals eat the same food?
Concept observe closely **Enquiry type:** Identify, group and classify	**Concept** Gather and record results; Interpret results answer the question **Enquiry type:** Identify, group and classify	**Concept** Interpret results – answer the question **Enquiry type** Research using secondary sources
Children will know that an animal is a living thing that moves around to find food. **Children will know that** animals belong to groups. They will know the group names fish, bird and insect. They will know fish have fins and gills. They will know birds have feathers and beaks and that insects have six legs. **Children will know how to** observe closely by looking carefully at each animal's body to identify distinguishing features. *N.B Children need to be able to name and identify a range of animals in each group e.g. name specific birds, fish, reptiles, mammals etc. They do not need to use the terms mammal, reptiles etc. or know the key characteristics of each, although they will probably be able to identify birds and fish, based on their characteristics. Some children will know terms such as mammal and reptile which you can praise them for knowing but it is not sticky knowledge.* ***Practise:** Teach the sticky knowledge in small steps. In table groups, classify images into two groups: e.g. fish/not fish, insect/not insect and bird/not bird.* ***Apply:** complete own cut and stick classifying sheet - - four areas – fish, insects, birds and other animals using images of animals not used within the practise. Label each image with its name (have a wordbank available).* ***Deepen:** task that addresses a misconception about animal class.* 	**Children will know** that animals vary in many ways, having different structures e.g. wings, tails, ears, paws, hooves, feet etc and amounts of body parts e.g. 4 legs, 2 legs, 6 legs. They will know they have different skin coverings e.g. scales, feathers, hair. They will understand these key features can be used to identify them. Children will be able to classify animals according to appearance by 1 criterion. Children will be able to describe the body structure of an animal and compare it to another animal, describing how they are the same and different. They will use appropriate scientific language to communicate these ideas, using the words above in the sticky knowledge and the key vocabulary listed. ***Remember:** Match the words animal, bird, fish and insect to the correct simple definition.* ***Practise:** Table group classifying images after each small step teaching, e.g. paws/hooves/feet; Has scales/Does not have scales*; has wings/does not have wings. (Not recorded) ***Apply:** Following I do/we do, children select two images of animals to compare, using sentence stems and word banks that were modelled during input. e.g. These animals are similar because they both have…. These animals are different because…* ***Deepen:** Mystery animal – teacher to describe an animal referring to body structure. Children identify it from a selection of images. Repeat with children choosing a mystery animal to describe.* 	**Children will be able to** identify and name a variety of common animals that are carnivores, herbivores and omnivores.  Children will know that animals need food to survive. Animals eat certain things - some eat other animals, some eat plants, some eat both plants and animals. You could introduce this knowledge with a video such as Carnivores, Herbivores and Omnivores | KS1 Year 1 Science | Home Learning (youtube.com). Children will be able to identify and name a few animals that eat other animals, identify and name a few animals that eat plants and a few animals that eat both animals and plants. *The children will be exposed to the words carnivore, herbivore and omnivore. They do not need to use the words carnivore, herbivore and omnivore, they can just refer to the definitions. Ensure that they understand that carnivores eat other animals, not just using the word meat.* Children will know that sometimes questions in science cannot be answered by carrying out an investigation. They can find out answers by researching in books, videos or websites. Children will be able to use a simple text or video to find out about the sticky knowledge. ***Remember:** Explorify: Flappy birds – similarities and differences of body structures.* ***Practise:** I do/we do – sort the images of animals and label them with their names under the headings: eats other animals/eats plants/eats both plants and animals by referring to a teacher-written text that identifes them as carnivores, herbivores and omnivores.* ***Apply:** Children refer to a teacher-written text in order to sort images and label as above.* ***Deepen:** Why do you think carnivores and herbivores have different shaped teeth? (Short class discussion based on their observations). N.b. Yr 4 learn about the functions of teeth.*

Enquiry Question What are our body parts called?	**Enquiry Question** Are all humans the same?	**Enquiry Question** How do humans sense the world around them?
Concept present and report findings	**Concept** plan, set up and perform an enquiry; take measurements; gather and record results **Enquiry type** Pattern seeking (deepen)	**Concept** observe closely; gather and record results
Remember: *Repeat the mystery animal activity from lesson 2 to reactivate knowledge of animal body structures.* **Children will be able to** identify, name, draw and label the basic parts of the human body Humans have key parts in common. Children will know basic body parts such as legs, arms, neck, eyes, mouth, nose, chin, cheek etc but also know chest, shoulder, elbow, knee, ankle. Could use the song – heads, shoulders, knees and toes as part of the teaching. **Children will know how to** report findings via labelling a drawn diagram. ***Check:****Simon Says – touching/moving particular body parts – particularly focusing on less common vocabulary such as shoulder and elbow.* ***Practise:*** *I do/we do/you do - how to draw an arrow with arrow pointing at the correct part of diagram and writing the label on the other side of the arrow, ensuring we are righting left to right and also not along the arrow line. This could be done on a preprinted face outline and practise with I do - eyes, we do - nose, you do – mouth, ears, chin, cheek.* ***Apply:*** *Table group – draw around one child on large paper – children in group take turns to turn over a body part card and label the diagram (don't use facial features this time). Please photograph for books.*	***Remember:*** *Simon Says related to body parts – check children who were insecure and reinforce weak vocabulary noted from last time.* **Children will know** humans have key parts in common, but these vary from person to person. They will be able to compare how they are similar and different to another human, e.g. by comparing eye and hair colour, height, length of foot etc. ***Check:*** *Sit with a partner to discuss similarities and differences. Use sentence stems: We both have…* *I have … but he/she has … Listen in to pairs and share some with class, targeted questioning to appropriate individuals.* Perform a simple test with support based on a question suggested to them, taking measurements, recording results and referring to results to answer the question. Question: Who has the longest feet in my table group? ***Practise:*** *Practise planning the simple test to check this- through guided questioning, ask children to suggest ways of how we might find this out. Lead them to realise the importance of measuring rather than observing and that recording is important so we don't forget the measurements.* ***Practise:*** *Practise measuring printed footprints using cubes to check the children know where to place cubes to begin, and to measure the longest part, etc. Practise recording results on a pre-given table. Discuss how we know which one is the longest foot.* ***Apply:*** *Where possible, have even groups so that each person measures a partner's foot, records on the group recording sheet and swaps. Record at the bottom of the group sheet in a sentence scaffold – the answer to the question - ___ has the longest feet in our group.* ***Deepen:*** *Is the person with the longest feet the tallest in the group? Oral predictions – check by standing in a line from shortest to tallest. No recording but a slip in book could be stuck in to evidence activity.*	***Remember:*** *True/false: Most humans have the same body parts. All these body parts are the same.* **Children will be able 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. Animals have senses to know about the world around them and to help individuals survive. When animals sense things they are able to respond. The human senses are sight, hearing, smell, taste and touch. Humans have eyes for sight, ears for hearing, a nose for smell, a tongue for taste and skin for touch. Children should be aware that although we often use our hands and fingers to feel things, skin anywhere on our body has the sense of touch. Children could carry out an activity such as identifying/describing materials by using different body parts such as elbow, knee, fingers, nose, chin to feel the materials to confirm that the skin on all body parts can feel. Children will be able to draw the body parts that are associated with senses and label each body part with the sense it is associated with. ***Practise:*** *Have a recording sheet with 5 rows. Each row labelled as a sense. Children should draw the body part associated with that sense and name it with a caption. For touch we want them to draw the whole body and label it skin, not just drawing a hand.* ***Apply:*** *Mystery items – what is it? E.g. Smell something, describe and predict what it could be, feel it, describe, predict, taste it…describe, predict. Sight – to check what it is, e.g. strawberry ice-cream. Record on the recording sheet started in practise – in a column to the right. (Sheet like the one made last year).* ***Deepen:*** *Which is the most important sense? Why do you think this? This could be written or oral. If written need to follow up with oral – discussing how blind or deaf people can manage a successful life without a sense that many may consider the most important.* Assessment opportunity for gathering and recording results: Children should record observations in a pre-prepared table for an enquiry using all the senses to identify a mystery object, e.g. strawberry ice-cream.