







Netherton C of E Primary
Subject: Science – Animals Including Humans

Year: 1	Big Question: What are the animal groups and which one do we belong to?
Context and curricular links	<p>Prior units and knowledge: Use all their senses in hands-on exploration of natural materials (Nursery - Humans); Name and describe people who are familiar to them (Reception - Humans).</p> <p>Future learning: Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food (Y2 - Living things and their habitats); 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).</p>
School values, spirituality and school vision <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p style="font-size: small;">Our vision is for all children to believe</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  I am loved. </div> <div style="text-align: center;">  I am accepted. </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;">  I can grow. </div> <div style="text-align: center;">  I can do it. </div> </div> </div>	<p>Fairness: Treating others fairly when using lesson resources, allowing everyone to use / handle things.</p> <p>Acceptance: Accepting that not everyone’s body is the same and that we should embrace and celebrate differences.</p> <p>Perseverance: Persevering when we find new information hard to understand.</p> <p>Respect: Respecting our bodies and wanting to keep them in the best condition we can.</p> <p>Forgiveness: Forgiving people for errors they make or misconceptions they may have, know we all learn at different paces.</p> <p>Positivity: Remaining positive when taking on new information and tasks.</p>
Key Milestones for the unit	<p>Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.</p> <p>Identify and name a variety of common animals that are carnivores, herbivores and omnivores.</p> <p>Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including domestic animals).</p> <p>Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</p> <p>Identify and classify.</p>
Essential Information for Teachers	<p>Common Misconceptions:</p> <ul style="list-style-type: none"> • 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

<p>'Golden Nuggets' To be reviewed orally at the beginning of each lesson and accumulate across the unit</p>	
<p>'Golden Nugget' based on previous unit</p>	<p>What are plants and what are animals? Animals are creatures that move around to find their food; plants make their own food.</p>
<p>'Golden Nugget' based on Lesson 1</p>	<p>What are the animal groups and which animals belong in them? Mammals: rabbits, humans, elephants, cats etc. Reptiles: lizards, snakes, tortoises etc. Fish: goldfish, sharks, clown fish etc. Amphibians: newts, toads, frogs, etc. Birds: seagulls, robins, owls etc.</p>
<p>'Golden Nugget' based on Lesson 2</p>	<p>How are the animal groups different? Mammals: produce milk for offspring; <u>most</u> have hair or fur; <u>almost all</u> give birth to live young; warm-blooded; breathe through lungs Reptiles: cold-blooded; lay eggs; <u>most</u> have four legs; breathe through lungs; scales Fish: cold-blooded; fins; gills; <u>most</u> have scales; live underwater Amphibians: need moist environments or water to survive; cold-blooded, absorb water and breathe through thin skin; life cycle: egg-larva-adult Birds: warm-blooded; <u>most</u> fly; beaks; lay eggs; two legs; wings; hollow bones</p>
<p>'Golden Nugget' based on Lesson 3</p>	<p>What are herbivores, omnivores and carnivores? Herbivores: Animals that eat mainly plants.</p>

	Omnivores: Animals that eat both meat and plants. Carnivores: Animals that eat mainly meat.
'Golden Nugget' based on Lesson 4	What body parts do humans have? Main body parts children need to know, at this stage: head, ears, nose, neck, hands, feet, hair, eyes, teeth, mouth, shoulders, arms, legs.
'Golden Nugget' based on Lesson 5	What body parts do we use for the five senses? Sense of smell: nose Sense of sound: ears Sense of sight: eyes Sense of touch: skin Sense of taste: mouth

Week 1	Key Question for Lesson 1: What are the animal groups and which animals belong in them?	Key Vocabulary
	<p>Key Milestone: Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. Secondary Milestone: Identify and classify.</p> <p>Resources: clipboards, pencils, iPad for camera use</p> <p>Useful Links: - Home San Diego Zoo Animals & Plants (while this has a lot of detailed information, if you click on each animal group and scroll down, it shows examples of animals from each group)</p> <p>- Remember It: Ask the children if they know what an animal is. Make a note of their ideas and address any misconceptions. Show the children the photographs on the PPT. Can the children spot and name the animals in each picture?</p> <p>- Different Types of Animals: Use the PPT to share read about the different animal groups and some of the names of animals to the children, asking them to discuss the questions on each slide in pairs. Can children name the groups of animals, and can they identify animals from different groups?</p> <p>- Animals All Around Us: Ask the children to discuss the questions on the PPT and think about where they might see different types of animals.</p> <p>- Observing Animals: Take the children outside to observe the types of animals in their local environment. Use the Animal Groups Key and Observing Animals Activity Sheet (crop for books) to help them to record their answers. You may wish to take a camera to photograph any animals the children don't know the names of. These could then be used for further research. Can the children name some common animals in their local area? Can they identify what animal group they belong to?</p>	<ul style="list-style-type: none"> • animals • birds • reptiles • mammals • amphibians • fish • observe • identify • classify <hr/> <p style="text-align: center;">Evaluation</p>

- **Answering Questions:** Recap the animal groups the children thought they might see in the local area. *Which animal groups did you see? Where did you see them? Which animal groups did you not see? Why do you think this is?* Use the last slide of the PPT to help the children to sum up their findings by completing the statements. Can children name and identify groups of animals that they saw in their local area?


Cross Curricular Links

English: Shared reading.

'Exit Ticket'

Children match the animals to their animal group.

Which animal group do the animals belong to?



reptile fish amphibian mammal bird

Exit Ticket

Week 2	Key Question for Lesson 2: How are the animal groups different?	Key Vocabulary
	<p>Key Milestone: Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including domestic animals).</p> <p>Secondary Milestone: Identify and classify.</p> <p>Resources: iPad for camera use, non-fiction books about animals / animal groups (see library), whiteboards and pens</p> <p>Useful Links:</p> <ul style="list-style-type: none"> - Animal Characteristics & Classification Game - Science - Sheppard Software Educational Games for kids - Basic Types of Animals and Their Characteristics YourDictionary (for teacher use) <p>- Remember It: Show the children the animals on the PPT. Can they remember which groups these animals belong to?</p> <p>- Looking Closely: Using the PPT, look closely at each of the animals. Using the questions on the PPT, ask children to name the features of different animals, for example, beak, legs, claws, eyes, ears, etc. Draw attention to the parts the children might not know, such as beak or wings. Can the children name some of the features of animals from each group?</p>	<ul style="list-style-type: none"> • similarities • differences • mammal • amphibian • reptile • bird • fish • feathers • scales • hair • legs • fur • eggs • wings

- **Comparing Animals:** Share the statement about birds on the PPT and ask children to discuss with their partners whether they think it is correct. Ask children to suggest ways in which they could find out if the statement is correct. Show the children the photographs of the penguin and the robin on the PPT. Ask them to work in pairs, on a whiteboard, to write down all the features they can see for each bird, e.g. 2 legs, 2 wings. Record children's ideas on a large copy of the Comparing Animals Activity Sheet (you may wish to add this to the working wall for reference throughout the topic). Look over some examples on the PPT and ask children what they find out about the statement. Use the eBook pages (see resource folder) on the PPT to prove whether all birds can fly or not. Can children discuss how animals are similar and different?

- **Finding Out More:** Explain that children will be using photos and other secondary sources to compare animals from different groups. Use the questions on the PPT to get the children to hypothesise how they think the animals will be the same/different and make notes on the working wall. Can the children suggest ways they think animals in each group are the same and how they are different? Can children discuss how animals are similar and different? Children complete the differentiated Comparing Animals Activity Sheet.

- **True or False?:** Children explain what they know from their observations. Challenge children to answer true or false statements on the PPT. Can children say how animals from each group are the same and how they are different? Can they give examples to back up their ideas?

- beak
- gills
- fins
- lungs
- webbed feet

Evaluation


Cross Curricular Links

English: Shared reading.

'Exit Ticket'

Children label the features of a given animal, using what they know about that animal group.

Which features of this animal make it belong to the bird group?



Exit Ticket

Key Milestone: Identify and name a variety of common animals that are carnivores, herbivores and omnivores.

Secondary Milestone: Identify and classify.

Resources: non-fiction books about animal diets, if required

- **Remember It:** Using the Knowledge Organiser Activity Sheet, ask children to demonstrate what they can remember by matching up the descriptions and pictures to the animal groups and filling in the key knowledge (animal names). Give children a few minutes to discuss with a partner where they think each description or picture belongs. Can children add any extra information or facts to the Knowledge Organiser Activity Sheet?

- **Diets:** Explain to children that diet means the foods animals eat. Show children the animals on the PPT. Working with their talk partner, ask them what they think each of these animals eats. Ask other pairs if they agree or disagree with these ideas and ask them to explain why. Discuss with children the three diet types; herbivore, carnivore and omnivore and what each of these groups eats, using the PPT to help. Ask children to discuss with their partner which type of diet they have. Explain that humans are naturally omnivores, but some humans choose to only eat plant-based diets. Can the children explain what kind of diet they eat and offer suggestions about the diets of other animals?

- **Herbivores, Carnivores and Omnivores:** Look at the carnivores, herbivores and omnivores on the PPT. Draw attention to each animal, what it eats and the animal group it belongs to. Can the children name some carnivores, herbivores and omnivores?

- **What Do They Eat?:** Show children the animals on the PPT. Ask children, in pairs, to sort these into the right diet group. Prompt children as needed, by reminding them what food each animal eats. Show children the three animals on the next slide of the PPT. *How can we find out what these animals eat?* Elicit using secondary sources, such as books. Show the pages from the Animal Diets eBook Printout on the PPT and ask children to work with talk partners to look for information about what each of the animals eats. (The eBook printout could also be given to children.) Can the children sort the animals according to their diet? Can the children identify what different animals eat? Children use the Animal Fact Cards to help them to complete the Animal Diets Sorting Activity Sheet.

- **Dinner Is Served:** Show the children the food on the PPT. Ask them to discuss which food they think would be suitable for each of the animals and why. Can the children name some carnivores, omnivores and herbivores and explain what each would eat?

- herbivore
- carnivore
- omnivore
- diet
- mammals
- reptiles
- birds
- amphibians
- fish
- similarities
- differences

Evaluation

Cross Curricular Links

English: Shared reading.

'Exit Ticket'

Children draw an example of a herbivore, omnivore and carnivore.

Which animals would belong in these diet groups?

herbivore	omnivore	carnivore	Exit Ticket

Week 4	Key Question for Lesson 4: What body parts do humans have?	Key Vocabulary
<p>Key Milestone: Identify, name, draw and label the basic parts of the human body.</p> <p>Resources: scissors, glue, post-it notes, A3 paper</p> <p>- Remember It: Play the sorting game on the PPT as a class. Read the instructions on each slide and ask children to sort the animals. As children suggest ideas for each photo, ask them which features they think the animal has that makes it part of that group.</p> <p>- Simon Says: Ask children if they can remember what animal a human is. Remind the children that humans are mammals. Explain that they are going to find out more about the human body. Play Simon Says with the children, starting with the basic parts of the body. Can the children identify the parts of their body?</p> <p>- Humans: Show children the diagram of the human body on the PPT. Ask them to identify some of the main parts of the body, such as the legs, arms, head, etc. Continue to identify different parts of the body until all the labels are completed. Using the PPT, ask children to identify the parts of the body and what they think the job of each body part is.</p> <p>- The Human Body: Children to complete the Human Body Activity Sheet. Can they name and label the parts of the body correctly?</p> <p>- Body Bingo: Put children into groups of three or four. Each group needs to decide on six body parts and write a label for these on a sticky note (one body parts on each note). Each group chooses one person to be the 'bingo board'. The group then stick their labels on the correct place of that child's body. Call out the names of body parts. If the team have that body part labelled, they take the label off their team member. The first group to remove all of the labels wins. Can the children name and identify the parts of the human body?</p>		<ul style="list-style-type: none"> • human body • leg • arm • neck • head • shoulder • elbow • hand • finger • stomach • hip • knee • feet • toe • eyes • ears • nose • mouth • skin • hair • tongue

- ankle

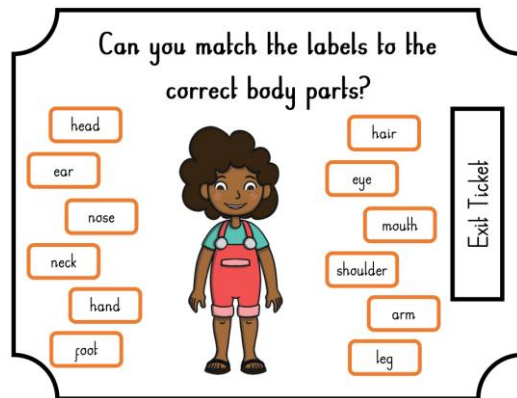
Evaluation

Cross Curricular Links

English: Shared reading.

'Exit Ticket'

Children draw lines from the labels to the matching body part on the diagram.



Week 5

Key Question for Lesson 5: What body parts do we use for the five senses?

Key Vocabulary

PLEASE CHECK THE CHILDREN'S RECORDS FOR ANY ALLERGIES PRIOR TO THE DELIVERY OF THIS LESSON

Key Milestone: Say which part of the body is associated with each sense.

Secondary Milestone: Perform simple tests.

Resources: 2 teddies, blindfold, book, plastic building blocks, paper, pencils, coat or jumper, very simple jigsaw puzzle, maracas (or rice in a plastic tub), drum, triangle, tambourine, bell, dinosaur, sandpaper, ice, wooden block, scented solid soap, mustard, oranges, lemons, solid chocolate, ready salted crisps, banana, raspberries

Prior Preparation: Ready at the front of class to demonstrate: 2 teddies, drum, tambourine, maracas (or rice in a plastic tub) and a triangle.

- senses
- sight
- taste
- hearing
- touch
- smell
- test
- fair

Evaluation

Boxes set up with objects. (One box for each table for sight, touch, smell and taste or fewer sets of resources for these four senses if you are rotating the tasks around groups.)

- **Remember It:** Recap the parts of the human body using the game on the PPT. Show children the diagram of the human body on the PPT. Ask them to work as a team to complete the labelling before the timer runs out.

- **Senses:** Ask children to look carefully at the picture on the PPT and describe what they can see. Then, ask them to close their eyes and to listen carefully to the sounds. Explain that they have just used two of their senses: sight and hearing. Using the PPT, discuss how humans have five senses and that these help us to stay safe and to understand the world around us. Ensure that children understand that the sense of touch comes from the skin and not just the hands. Read the extract from the Animals All Around eBook (see resource folder) to learn about the senses. Make a note of key words such as sweet, sour, salty and bitter to refer to and use during the senses testing later in the lesson. Can the children name the five senses and the body part associated with each sense?

- **Using Your Senses:** Work your way through the slides on the PPT. Explain to children that they are going to use their senses to help them explore objects. Discuss which teddy is the softest and how they can find out. Show two teddies to the class and ask some children to test which of these teddies is the softest. To help children understand the sense of touch, encourage them to also use their arms, legs, and other parts of their skin to feel the teddies and reiterate that the sense of touch comes from the skin and not the hands/ fingers. Following the prompts on the PPT, ask the children to close their eyes while you play a tambourine, a drum, and a triangle in turn and to guess which instrument they can hear each time. Discuss how they could test which instrument makes the loudest sounds. Do the children know which sense to use to perform different tests?

- **Testing Your Senses:** Explain that the children will be using their five senses to do some tests. Explain that before they begin each test, they will discuss and answer some questions. Explain that scientists often think they have an answer to a question and then use tests to find out if they are right. Using the PPT, model how to discuss the questions on Sheet 1 of the Senses Activity Sheet and then work through an example test together about hearing. Make sure children understand that once they have completed the tests each time, they should discuss what they found out and that one member of the group should write down their findings on Sheet 2 of the Senses Activity Sheet.

- **Carrying Out Tests:** Put children in small groups of 5 or 6 and ask them to work through the tests for each of the remaining senses. The organisation of this will depend upon availability of resources and how independently the children can work. You may choose to rotate the tasks so that different groups are working on different activities or it may work better to explain one of the senses tasks to the whole class and all the groups work on this at the same time before bringing out the equipment for the next senses test. Children will work in pairs to test the questions but discuss predictions and findings as a group, with just one member of the group recording the groups' ideas each time. Can the children perform simple tests to test their ideas?

Tables set up with objects:

- **Sight** (Children will require a blindfold.) Objects: book, plastic building blocks, paper and pencils, coat or jumper, very simple jigsaw puzzle.
- **Touch** Objects: teddy, dinosaur, sandpaper, ice, wooden block.
- **Smell** Objects: scented solid soap, mustard, slices of orange, solid chocolate.
- **Taste** Objects: chocolate, slices of lemon, ready salted crisps, banana, raspberries.

- **What Did We Find Out?:** Using the PPT, ask children to share their initial ideas about one of the sense tests and their answers after the test. *Did everyone agree on the answers? Why/why not?*

Cross Curricular Links

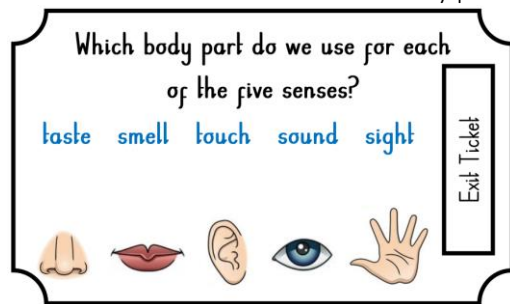
English: Shared reading.

'Exit Ticket'

Children match the sense to the body part that we use for it.

Which body part do we use for each of the five senses?

taste smell touch sound sight



Week 6	Key Question for Lesson 6: How can we classify animals?	Key Vocabulary
	<p>EXTRA LESSON – MIGHT BE GOOD FOR ORACY</p> <p>Key Milestone: Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including domestic animals).</p> <p>Secondary Milestone: Identify and classify.</p> <p>Resources: sorting hoops, whiteboards and pens</p> <p>- Remember It: Children recap learning from this topic by discussing which statements are correct on the PPT. Allow children time to reason and discuss their ideas with a partner.</p>	<ul style="list-style-type: none"> • classify • sort • features • reptiles • amphibians • mammals • birds • fish • diet • herbivores

<p>- Animals All Around: Show children the animals on the PPT. Give children a few minutes to discuss what animals they can see and ask key questions from the PPT. Once children have had the opportunity to discuss their ideas, ask selected children to feed back some of their ideas for each question. Can the children identify animals and explain the ways they are similar and different?</p> <p>- Grouping Animals: Show children the first set of animals on the PPT and ask them to work with a talk partner to sort animals according to the criteria. They can write or draw these on individual whiteboards. Ask children to explain their ideas for sorting. Do their groups meet the criteria? Repeat with the next criteria. Then, ask the children to work in pairs to find a new way to sort the animals. Explain to children that the animals in each group must have something that is the same (for example, they are all birds, all herbivores, they all make loud noises, they all have soft coats, etc.) but the children can choose how to sort them. Children explain their ideas. These can be added to the working wall. Can the children sort animals into groups according to a given criteria? Can the children choose their own criteria for sorting the animals?</p> <p>- Sorting: Children work in pairs or small groups to sort the images of the animals according to their own criteria. When choosing their own criteria, children will explain either in writing or verbally why they have chosen to sort the animals in this way.</p> <p>- All Groups: Children use the Animal Photographs to choose their own ways to group the animals into sorting hoops. The list of Animal Diets is provided to support children who wish to sort by diet. Children could also use the eBook or other secondary sources as needed to help them with their sorting. Children’s sorting could be photographed or they could record their groups on the first page of the Sorting Animals Activity Sheet.</p> <p>- Challenge: Children to look at the groups of animals on the Sorting Animals Activity Sheet and explain why they have been grouped together. At the end of the activity, spend 5 minutes asking children for their sorting criteria. Can the children choose their own way of sorting the animals based on their knowledge of Animals Including Humans?</p> <p>- What Do We Know?: Children complete the Incomplete Knowledge Organiser to demonstrate what they know.</p>	<ul style="list-style-type: none"> • omnivores • carnivores
	Evaluation
Cross Curricular Links	
English: Shared reading.	