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| Subject: Science Phase 1 – Year B Animals and Evolution  NC/PoS:   * 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) * identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. |
| Prior Learning (what pupils already know and can do).  Know there are different types of animals that live in different places - ocean, woodlands. Through visit to the zoo encountered animals not usually found in the UK. Senses have been taught in reception. |
| End Goals (what pupils MUST know and remember)   * Know the animal kingdom is classified into fish, amphibians, reptiles, birds, and mammals * Know a carnivore feeds on other animals, examples are fox, shark, crocodile, frog, owl * Know an herbivore feeds on plants, examples are cows, pigeon, tortoise, parrotfish * Know an omnivore feeds on both animals and plants, examples are lizards, bears, yellow-legged frog, crow, goldfish * Know five of the senses are associated with the following: hands-touch; nose-smell; mouth-taste; eyes-see and ears-hear * Name examples of fish: trout, salmon, cod, plaice * Name examples of amphibians: frog, newt, toad * Name examples of reptiles: lizard, snake, turtle, alligator * Name examples of birds: sparrow, blackbird, robin, chicken * Name examples of mammals: humans, dog, rat, bear * Know animals can be warm or cold blooded * Know that animals are part of the food chain * Know the life cycle of a frog * Know that some offspring are different from the adult e.g. caterpillar * Know that all animals need the right type of nutrition * Know what a primary consumer and secondary consumer is. |
| Key Vocabulary: head, neck, arms, elbows, legs, knees, face, ears, eyes, hair, mouth, teeth, ankle, tongue, shoulder, stomach, nose, sense, smell, sight, touch, taste, hear, group, classification, animal kingdom, amphibians, reptiles, birds, fish and mammals, omnivore, herbivore, carnivore, meat, grains, plants and leaves, fruit and vegetables, warm blood, cold blooded |
| Session 1: Recap: match the sense to its body part  LO: to group animals according to their classification  Watch <https://www.youtube.com/watch?v=2wurZciX_N4>  Use the power point from YPTE (Young Peoples Trust for the Environment)  Sort photographs of different animals and sort them depending on their classification include trout, salmon, cod, plaice, frog, newt, toad, lizard, snake, turtle, alligator, sparrow, blackbird, robin, humans, dog, rat, bear   * Fish – have a backbone, gills and fins * Amphibians – have moist, scale less skin that absorbs water and oxygen * Reptiles – have tough scales and efficient lungs for breathing air. * Birds - have a light skeletal system and muscles to help it fly. * Mammals – have hair or fur, female produce milk for their young   Children record the groupings with reasons why  Which ones are warm/cold blooded?  Cold blooded: do not have a constant body temperature but instead take on the temperature of their environment e.g. fish, reptiles and amphibians  Warm blooded: animals maintain a constant body temperature e.g. mammals and birds  Vocabulary: group, classification, animal kingdom, amphibians, reptiles, birds, fish and mammals, warm blooded, cold blooded |
| Session 2: Recap: match an example of amphibian, reptile, bird, fish and mammal with the correct features. Name 3 of each: amphibian, reptile, bird, fish and mammal  Lo: to identify animals that eat different diets  <https://www.youtube.com/watch?v=QJOMuPMBFx0&t=21s>  Give children a variety of photographs of animals and let them predict which diet they eat.  They go through them  Children record some of the things they found out e.g., the snake is a reptile that eats small rodents so is a carnivore, but a tortoise is a herbivore.  N. B. only 5% of fish are herbivores  Vocabulary: omnivore, herbivore, carnivore, meat, grains, plants and leaves, fruit and vegetables |
| Session 3: Recap: Name 3 animals that are herbivores, 3 that are carnivores and 3 that are omnivores  Lo: to present and record data  Children bring in photographs of any pets (within their family) and what they eat  Record in a pictogram  Vocabulary: present, record, data, pets |
| Session 4: Recap herbivores, carnivores and omnivores.  Children learn about vertebrates and non vertebrates. Children to sort a selection of creatures.  Label and classify vertebrates and non vertebrates. Know that some animals have skeletons and muscles for support, protection, and movement |
| Session 5: recap vertebrates and non vertebrates.  Know all animals, have offspring which then grow into adults. Put the stages of different animals into order: salmon, butterfly, turtle, penguin.  Know some offspring are different from their adults e.g., caterpillar-butterfly, tadpole-frog.  Vocabulary: Life cycle, offspring, |
| Session 6: recap life cycles, can the children order the lifecycle of a frog.  [What is a food chain? - BBC Bitesize](https://www.bbc.co.uk/bitesize/articles/zwbtxsg)  Construct and interpret a variety of food chains, identifying producers, predators, and prey. Know the foods different animals might eat and how they find their food – whales hunt for krill.  Children to construct a variety of food chains. Children to research creatures and the food that they eat and what eats them. Introduce the vocabulary prey, predator, consumer and producer.  Vocabulary: prey, predator, consumer, producer. |
| Session 7:  Identify that an animal, 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.  Know animals, get their nutrients from what they eat. Know all animals, need the right amount of nutrients from the food they eat. |
| Session 8:  Know energy passes along the food chain. Know all food chains, start with a plant which is a producer as it makes its own food.  Know that animals that eat plants are primary consumers. Know that primary consumers may be eaten by secondary consumers or predators.  Vocabulary: food chains, producer, primary consumer, secondary consumer, predator |
| Link to career:  Zoologist, Zookeeper |
| Scientists who have helped develop understanding in this field: Carl Linnaeus |