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| Subject: Science - Year 2 Year: KS1 Animals including humans (basic needs)  NC/PoS:   * notice that animals, including humans, have offspring which grow into adults * find out about and describe the basic needs of animals, including humans, for survival (water, food and air) * describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. |
| **Prior Learning** (what pupils already know and can do)  Animals can be grouped into amphibians, reptiles, birds, mammals and fish. Different animals have different diets depending on whether they are a carnivore, herbivore or omnivore. |
| **End Goals** (what pupils MUST know and remember)   * Know all animals, need food, water, air, and shelter * Know animals, need to stay fit by eating sensibly and taking regular exercise * Know all animals, need to eat a balanced diet * Know the food groups are carbohydrates, proteins, fats, fruits and vegetables and dairy * Know all animals, have offspring which then grow into adults * Know some offspring are different from their adults e.g., caterpillar-butterfly, tadpole-frog * Know the four stages in a life are: birth, growth, reproduce and death * Know animals also need exercise and sleep to keep a body healthy * Know humans are hygienic to stop the spread of germs |
| **Key Vocabulary**:  offspring, adult, birth, growth, reproduce, death, life cycle, food, water, air, survive, survival, shelter, food groups, fruits and vegetables, dairy, fats, balanced diet, sleep, exercise, hygiene, germs, |
| **Curriculum Connections**   * Mathematics: grouping foods, periods of time * PSHE: Promoting healthy lifestyles and personal hygiene. * History: learning about significant people from the past * English: use of adjectives and adverbs to describe animals and foods * DT: preparing a healthy snack * Art: observational drawing of fruit |
| **Career Opportunities**   * Sports Scientist: Studies the impact of exercise on the human body. * Nutritionist: Advises on healthy diets and nutrition plans. * Medical Scientist: Research health solutions, including vaccines. * Wildlife Biologist: Examines life cycles and survival needs of animals. * Chef: Creates and prepares meals * Greengrocer: sells fruit and vegetables |
| Session 1: review prior learning  Animals can be grouped in amphibians, reptiles, birds, mammals and fish. Discuss structures of these animals. Different animals have different diets depending on whether they are a carnivore, herbivore or omnivore. Name animals that are carnivores, herbivores and omnivores.  Introduce careers: wildlife biologist,  sports scientist <https://www.youtube.com/watch?v=mG7B_Y_-HAk>  medical physicist <https://www.youtube.com/watch?v=IF0WqVk0cTY> (up to 1 minute) |
| Session 2: Recap: Name examples of fish: trout, salmon, cod, plaice; examples of amphibians: frog, newt, toad; examples of reptiles: lizard, snake, turtle, alligator; examples of birds: sparrow, blackbird, robin; examples of mammals: humans, dog, rat, bear  Lo: to identify the offspring of animals  Match photographs of adult animals with their offspring  All animals have offspring which grow into adults.  Vocabulary: offspring, adult, |
| Session 3: Recap: offspring with corresponding adult  Lo: to ask questions about growth in animals  <https://www.youtube.com/watch?v=vDDDwfvVUe4> animal life cycles  <https://www.bbc.co.uk/bitesize/topics/z6882hv/articles/zd4dkty> how animals grow  Videos include various lifecycles: caterpillar, frog, human, chicken  Four stages are: birth, growth, reproduce, death  Children ask questions about other animals’ lifecycles: are all lifecycles the same length? Which animal has the shortest life cycle? What is a baby squirrel called? Etc.  Children record their questions and research the answers  Vocabulary: birth, growth, reproduce, death, life cycle |
| Session 4: Recap: What are the four stages in an animal’s life?  LO: Researching what all animals need to survive  <https://www.bbc.co.uk/bitesize/topics/z6882hv/articles/z343f82> how do animals survive  <https://www.youtube.com/watch?v=YO1K4Tkhp50> basic needs of animals – great images   * Water - need fresh water for their bodies to function. It is vital. * Food - need food to provide energy to existing cells and to provide the raw materials and energy for the construction of new cells. * Air – need oxygen to live and there are also air pockets in soils and water that help tiny living things survive in water and beneath the soils.   N.B. all need a place to shelter  Vocabulary: food, water, air, survive, survival, shelter |
| Session 5: Recap: what do all animals need to survive?  LO: identifying food groups to keep the body healthy <https://www.youtube.com/watch?v=sQN8HWl6Svk> up to 1.34   * Children record the different food groups and food which belongs in them * Design a healthy lunch box * N.B. Eat different foods, including fresh fruit and vegetables. Five portions of these per day is best! Drink 6-8 glasses of water every day   Vocabulary: food groups, fruits and vegetables, dairy, fats, balanced diet, water |
| Session 6: Recap: the food groups and name at least two foods for each group  Lo: to identify ways to keep the body healthy  <https://www.youtube.com/watch?v=sQN8HWl6Svk> from 1.34  <https://www.youtube.com/watch?v=UxnEuj1c0sw> includes hygiene  Get around one hour exercise every day  Sleep well. It is best to try and sleep for 8-10 hours at night.  Keep yourself as clean as possible. Wash your hands before eating and after using the toilet. Cover your mouth when you sneeze    Lo: to explore different types of activities and their affect on the body  Children can explore different physical activities and how it affects their bodies  Vocabulary: sleep, exercise, hygiene, germs, |