|  |
| --- |
| Subject: Science Year: KS1 year 2  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 in 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)  To know animals and plants are made up of cells.  To know all animals need food, water, air and shelter  To know animals need to stay fit by eating sensibly and taking regular exercise  To know all animals need to eat a balanced diet  To know the food groups are: carbohydrates, proteins, fats, fruits and vegetables and dairy  To know all animals have offspring which then grow into adults  To know some offspring are different from their adults e.g. caterpillar-butterfly, tadpole-frog  To know the four stages in a life are: birth, growth, reproduce and death  To know animals also need exercise and sleep to keep a body healthy  To know humans are hygienic to stop the spread of germs |
| Key Vocabulary:  offspring, adult, calf, cub, lamb, colt, chick, duckling, piglet, kid, kitten, puppy, kit, birth, growth, reproduce, death, metamorphosis, life cycle, food, water, air, oxygen, survive, survival, shelter, : food groups, fruits and vegetables, carbohydrates, proteins, dairy, fats, balanced diet, sleep, exercise, hygiene, germs, physical |
| 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 (see resources)  All animals have offspring which grow into adults.  Vocabulary: offspring, adult, calf, cub, lamb, colt, chick, duckling, piglet, kid, kitten, puppy, kit, |
| 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, metamorphosis, 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, oxygen, 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, carbohydrates, proteins, 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's 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, physical |
| Link to career:  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) |
| Scientists who have helped develop understanding in this field: Aristotle |