Science Progression of Skills and Knowledge Animals including humans

Key to understanding this document: Black = National Curriculum objectives   Red = Knowledge/Skills to be taught Green = Resources to be used

Area of Learning	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Animals including humans		Working scientifically: To identify and classify a variety of common animals using pictures or videos. AH1 identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. Recognise and identify and name Frog, goldfish, snake, lizard, robin, blackbird, crow, magpie, cats, dogs, humans etc. Working Scientifically: To identify and classify. To record data in a simple scaffolded	Working scientifically: To observe closely, using simple equipment and use observations to answer simple questions. AH1 notice that animals including humans have offspring which grow into adults. Life cycle of a caterpillar – plasticise life cycle or caterpillar farm. Stages of human life – baby, toddler, child, teenager, adult, elderly. Working scientifically: To use observations to answer simple questions.	Working scientifically: Report on findings from enquiries including oral and written explanations. AH1 Identify that animals including humans need the right types amount of nutrition. Children create balanced menu in groups. Children could then have a competition to see which group created the best balanced meal, containing the different food groups. Compare and contrast the different amounts of food different animals eat.	Working scientifically: Setting up simple practical enquires. Making systematic and careful observations. To use written explanations to present findings. AH1 describe the simple functions of the basic parts of the digestive system in humans. Make the digestive system. Working scientifically: Identifying differences, similarities or changes related to	Working scientifically: Reporting and presenting findings from enquiries, including conclusions. AH1 describe the changes as humans develop to old age. Children describe the physical changes for each stage of life. E.g. puberty for a teenager. **This topic will taught in line with the Sex education policy.**	Working scientifically: Using models to describe scientific ideas. AH1 Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. Make blood, investigate the heart. Working scientifically: Identifying scientific evidence that has

■		table and use this to answer simple questions. AH2 Identify and name a variety of common animals that are carnivores, herbivores, and omnivores. Children can identify whether an animal is a carnivore, herbivore or omnivore and sort animals into simple groups. (e.g. hoops) Children create a simple table showing their results. Working scientifically: Use observations and ideas to suggest answers to questions. AH3 describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and	AH2 find out about and describe the basic needs of animals including humans for survival (water, food and air) Identify the things we need to survive. Working scientifically: To identify and classify based on their own observations. To perform a simple test to answer a simple question. AH3 describe the importance for humans of exercising, eating the right amounts of different food and hygiene. Introduce the eat well plate – fruit and vegetables, carbohydrates, oils and fats, dairy and protein. Prior to this children are given a selection of	Working scientifically: Identifying differences, similarities or changes related to simple scientific ideas. AH2 Animals cannot make their own food and that they get the nutrition from what they eat. Humans have a wide variety of foods with the different food groups. Compare to animals and how they are more restricted on the food they eat. **NOT FOOD CHAINS!** Working scientifically: Using straightforward scientific evidence to answer questions.	simple scientific ideas and processes. Record findings using simple labelled diagrams. AH2 Identify the different types of teeth in humans and their simple functions. Labelling teeth in humans and animals and describe the functions. Eat an apple and describe what teeth they are using. Working scientifically: Record findings using simple labelled diagrams. AH3 Construct and interpret a variety of food chains identifying		been used to support or refute ideas or arguments. AIH2 recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. Affect smoking has on the human body. Show pictures of lungs and compare. Discuss caffeine and the impact it has on the body. Working scientifically: Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.

		mammals, including pets) Label simple animal diagrams. E.g. fish with scales and gills. Birds with wings and feathers. Working scientifically: Gathering and recording data in a simple scaffolded table. AH4 identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. Draw round the human body and label each part with the correct sense. Senses carousel.	foods which they must sort into their own categories before learning about the food groups. Investigations to do with age impacting exercise abilities/ stamina.	AH3 identify that humans and some animals have skeletons and muscles for support, protection and movement. Children to identify and group animals with and without skeletons and muscles. Children look at different x-ray pictures and compare.	producers, predators and prey. Create own food chains.		AIH3 describe the ways in which nutrients and water are transported within animals including humans. Provide children with the resources so that they can find out about the roles that water play in keeping us alive; especially in transporting blood and nutrients around the body. http://www.cyh.com/HealthTopics/HealthTopicDetailsKids.aspx?p=335&np=284&id=1494 http://www.nhs.uk/Livewell/Goodfood/Pages/water-drinks.aspx
Key Vocabulary		Fish, reptile, mammal, amphibian, birds, carnivore, herbivore,	Egg, chick, chicken, caterpillar, pupa, butterfly, tadpole, frog, lamb, sheep, baby, toddler, child,	Nutrition, skeleton, balanced, muscles, support, protection, movement.	Predator, producer, consumer, prey, digestive system, mouth, tongue, teeth, stomach,	Growth, Puberty, gestation period	Diet, exercise, drugs, muscular, digestive system, smoking, caffeine, lungs

<td style="background-color:green"></td>		omnivore, gill, scales, wings, feathers, senses, smell, taste, touch, hear, see, human body, neck, head, elbows, arms, legs, knees, face, ears, toes.	teenager, adult, elderly, exercise, offspring, hygiene, survival and shelter.		small intestine, large intestine, rectum anus, carnivores, herbivores, decay, canines, molars.		
Resources		Mobile farm/ animal people in. Pictures of different types of animals. Senses carousel objects – feely boxes, items to put inside.	Caterpillar farm Photos of stages of life	X-ray pictures of animals. Pictures of animals and what they eat. Discovery walk	Tights, orange juice, cornflakes, banana plastic cups, bucket.	X-ray of teeth.	Balloons Skewer Straws Pulse meters Red coloured sweets Corn syrup White marshmallows