

Foston CE, Terrington CE VA & Stillington Primary Schools in Collaboration with Langton Primary School Progression Map

Subject: Biology- Understanding Animals and Humans

Intent

Within the Foston, Stillington and Terrington Federation, in collaboration with Langton Primary School, we intend that all our children will develop a deep curiosity about the world around them, and to experience the wonder which comes with gaining a knowledge and understanding about the processes and systems they can and can't see.

Our children will further develop:

- The ability to think independently and raise questions about working scientifically and the knowledge and skills that it brings;
- Confidence and competence in the full range of practical skills;
- Excellent scientific knowledge and understanding which is demonstrated in written and verbal explanations;
- Scientific enquiry skills to be embedded in each topic throughout the school to allow the children to build upon prior knowledge;
- The ability to undertake practical work in a variety of contexts;
- Have a clear understanding of the jobs available from science specialisms.

| Key Concept | Overview | EYFS | Key Stage 1 | Key Stage 2 Cycle | |
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| Understanding Animals and Humans | Topic | Spring Term 2 Growing babies Spring Term 2 Growing -On the farm -Growing animals | Animals including Humans (Staying Alive Cycle A, Animal Safari Cycle B) | Animals including humans | Animals including humans |
| | Objectives NC/ Milestones | 3 and 4 year olds Understand the key features of the life cycle of an animal. | Identify and name a variety of common animals that are birds, fish, amphibians, reptiles, mammals and invertebrates. | LKS2 Identify that animals, including humans, need the right types and amounts of nutrition that they cannot make their own food | UKS2 Describe the changes as humans develop to old age. |

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| | | | <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 (birds, fish, amphibians, reptiles, mammals and invertebrates, including pets).</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>Notice that animals, including humans, have offspring which grow into adults.</p> <p>Investigate and describe the basic needs of animals, including humans, for survival (water, food and air).</p> <p>Describe the importance for humans of exercise, eating the right amounts of different types of food and hygiene.</p> | <p>and they get nutrition from what they eat.</p> <p>Construct and interpret a variety of food chains, identifying producers, predators and prey.</p> <p>Identify that humans and some animals have skeletons and muscles for support, protection and movement.</p> <p>Describe the simple functions of the basic parts of the digestive system in humans.</p> <p>Identify the different types of teeth in humans and their simple functions</p> | <p>Identify and name the main parts of the human circulatory system, and describe the functions of, the heart, blood vessels and blood.</p> <p>Recognise the importance of diet, exercise, drugs, and lifestyle on the way the human body functions.</p> <p>Describe the ways in which nutrients and water are transported in animals, including humans.</p> |
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| Knowledge | <p>Reception</p> <p>Know and talk about the different factors that support their overall health and wellbeing:</p> <ul style="list-style-type: none"> -regular physical activity -healthy eating -tooth brushing -sensible amounts of 'screen time' - having a good sleep routine -being a safe pedestrian <p>ELG</p> <p>Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices.</p> | <p>To be able to identify and name a variety of common animals that are birds, fish, amphibians, reptiles, mammals and invertebrates.</p> <p>Specific example/s to be taught: Chicken, human, frog, tortoise, bear, fish, shark, ostrich, terrapin, tiger, snake, duck, lizard, spider, crab, starfish.</p> <p>-</p> <p>Identify and name a variety of common animals that are carnivores, herbivores and omnivores.</p> <p>Specific example/s to be taught: Horse, pig, hedgehog, elephant, chicken, cat, shark, tiger, giraffe, polar bear, bear, panda.</p> <p>-</p> <p>Describe and compare the structure of a variety of common animals (birds, fish, amphibians, reptiles, mammals and invertebrates, including pets).</p> | <p>That animals, including humans, need the right types and amounts of nutrition that they cannot make their own food and they get nutrition from what they eat.</p> <p>Specific example/s to be taught: Examples of foods from the following food groups: Bread, cereal and potatoes Fruits and vegetables Meat and fish Milk and dairy Fats and sugars</p> <p>That there are herbivores, carnivores and omnivores in the animal kingdom.</p> <p>-</p> <p>The skills to construct and interpret a variety of food chains, identifying producers, predators and prey.</p> <p>Specific example/s to be taught: Food webs: Rabbit, snake, grasshopper, mouse, lizard, hawk, grass.</p> <p>-</p> | <p>To identify and describe the changes of humans as they develop to old age</p> <p>Specific example/s to be taught: skin wrinkles and becomes drier, bones become more visible, bones and muscles become weaker, memory gets worse, immune system cannot fight disease as easily.</p> <p>-</p> <p>To know that the main parts of the circulatory system are the heart, blood and blood vessels.</p> <p>Specific example/s to be taught: Heart, blood vessels, blood.</p> <p>-</p> <p>That diet, exercise, drugs and lifestyle have an impact on the way the human body functions.</p> <p>Specific example/s to be taught: Alcohol Legal and illegal drugs Tobacco obesity</p> <p>-</p> |
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| | | | <p>Specific example/s to be taught: Shark, bear, owl, fish, deer, dog, pig, cat, giraffe, dolphin, lion, mouse.</p> <p>-</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>Specific example/s to be taught: head, neck, arm, elbow, leg, knee, face, ear, eye, hair, mouth, teeth, sight, smell, touch, hearing, taste.</p> <p>-</p> <p>Notice that animals, including humans, have offspring which grow into adults.</p> <p>Specific example/s to be taught: Humans – baby, toddler, child, teenager, adult. Animals – chickens, tigers, butterflies.</p> <p>-</p> | <p>To know that humans and some animals have skeletons and muscles for support, protection and movement.</p> <p>Specific example/s to be taught: Skull, jaw, humerus, radius, ulna, tibia, fibula, pelvis, femur, spine. Exoskeleton - ants Endoskeleton - elephants Hydroskeleton – earthworm Triceps and biceps</p> <p>-</p> <p>To describe the simple functions of the basic parts of the digestive system in humans.</p> <p>Specific example/s to be taught: Mouth – food is cut, mashed and softened by the mouth, tongue and teeth. Oesophagus – the pipe connecting the mouth to the stomach. Stomach – acts like a washing machine, cleaning food and starting to break it down. Small intestine – absorbs most of the nutrients. Large intestine – water is removed, and the rest of the food expelled as faeces.</p> | <p>To describe the ways in which nutrients and water are transported within animals, including humans</p> <p>Specific example/s to be taught: That nutrients and water are transported within the circulatory system.</p> |
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| | | | <p>Investigate and describe the basic needs of animals, including humans, for survival (water, food and air). Specific example/s to be taught: Humans – water, food, air, shelter, clothing. Animals – water, food, air, shelter.</p> <p style="text-align: center;">-</p> <p>Describe the importance for humans of exercise, eating the right amounts of different types of food and hygiene.</p> <p>Specific example/s to be taught: Exercise – that muscles become stronger and food energy is used up, and the other associated mental and physical benefits. Healthy eating – importance of a balanced diet, with foods from the different food groups (bread, cereals and potatoes, fruits and vegetables, meat and fish, milk and dairy, fats and sugars). Hygiene – Food poisoning caused by poor food hygiene, mould on food.</p> | <p style="text-align: center;">-</p> <p>To identify the different types of teeth in humans and their simple functions.</p> <p>Specific example/s to be taught: Incisors – cut food Canines – rip chunks off food Molars – grind food</p> | |
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| Vocabulary | | <p>Humans-intelligent mammals.</p> <p>Fish- vertebrates that live in water.</p> <p>Amphibians-cold-blooded vertebrates (vertebrates have backbones) that don't have scales.</p> <p>Reptiles- cold-blooded animals that are characterised by their scales and their ability to lay eggs.</p> <p>Birds -vertebrate animals that have feathers, wings, and beaks.</p> <p>Mammals -humans and all other animals that are warm-blooded vertebrates (vertebrates have backbones) with hair.</p> <p>Carnivore- an organism that eats mostly meat, or the flesh of animals.</p> <p>Herbivore- an organism that mostly feeds on plants.</p> | <p>Portion</p> <p>Herbivores – organisms which only eat plants.</p> <p>Carnivores – organisms which only eat meat.</p> <p>Omnivores – organisms which eat both meat and plants.</p> <p>Producer – organisms which make their own food from sunlight.</p> <p>Consumer – an organism that feeds on other organisms.</p> <p>Predators – an organism which hunts another organism for food.</p> <p>Prey – an animal which is hunted and killed by another animal for food.</p> <p>Exoskeleton – an organism with a skeleton outside of the body.</p> <p>Endoskeleton – a skeleton on the inside of a body.</p> | <p>Alcohol – a chemical substance</p> <p>Legal and illegal drugs – drugs which are legal and safe to take in recommended doses, and drugs which are damaging to human health in any dose.</p> <p>Tobacco – a nicotine containing plant which can be dried and smoked.</p> <p>Obesity – when a person weighs more than what is healthy.</p> <p>Old age – nearing the end of human life expectancy.</p> <p>Heart – the organ which pumps blood around the body.</p> <p>Blood vessels – a system of tubes running through the body to transport blood.</p> <p>Blood – a fluid which transports food and oxygen to organs, and takes waste away.</p> <p>Nutrients – substances in food that our bodies need to function.</p> | |

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| | | | <p>Omnivore- an organism that regularly consumes a variety of material, including plants and animals.</p> <p>Offspring- are the young born of living organisms.</p> <p>Babies /baby toddler - a very young child.</p> <p>Child- young human being below the age of puberty.</p> <p>Teenager- young person whose age falls within the range from 13–19.</p> <p>Adult- fully developed and mature.</p> | <p>Hydroskeleton – muscles which function as bones.</p> <p>Triceps – muscle along the back of the arm.</p> <p>Biceps – muscle along the upper front part of the arm.</p> <p>Mouth – the entrance to the digestive tract.</p> <p>Oesophagus – the tube connecting the mouth to the stomach.</p> <p>Small intestine – the part of the digestive system which absorbs most of the nutrients.</p> <p>Large intestine – the part of the digestive system which absorbs the water and expels the rest as faeces.</p> <p>Stomach – a “washing machine” which cleans the bacteria off food and begins the process of digestion.</p> <p>Incisors – teeth which cut food.</p> <p>Canines - teeth which rip food.</p> <p>Molars - teeth which grind food.</p> | <p>Circulatory system – the blood vessels which carry blood to and from the heart.</p> |
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| | | | | Specific parts of a skeleton: Skull, jaw, humerus, radius, ulna, tibia, fibula, pelvis, femur, spine. | |
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