



Animals Including Humans

<u>Nursery</u>	<u>Reception</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>
<p>Talk about some of the things that they have observed such as:</p> <p>Cat, dog, cow, sheep, pig, chicken. horse, duck, owl</p>	<p>Explore the natural world around them, making observations and drawing pictures of animals.</p> <p>monkey, giraffe, lion, tiger, elephant, zebra, rhino, hippo, penguin, camel, bear,</p> <p>Life cycle of a butterfly. Hatch butterflies from eggs.</p> <p>Egg cocoon caterpillar butterfly</p>	<p>Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.</p> <p>Pupils will recognise and name: Fox, badger, squirrel, rabbit, deer, mouse, goat Frog, newt, shark, lizard, crocodile, tortoise, turtle, robin, eagle, snake</p> <p>Identify and name a variety of common animals that are carnivores, herbivores and omnivores. Pupils will; Place the above into the above categories.</p> <p>Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets)</p> <p>Pupils will: Use observations to compare: Number of legs, wings. Body covering: fur, hair, wool, feathers, scales</p>	<p>Notice that animals, including humans, have offspring which grow into adults.</p> <p>Pupils will: Learn the life-cycle of a frog: egg (spawn) tadpole, froglet, adult. Baby, toddler, adolescent, adult, elderly. Butterfly life cycle in greater detail pupa, chrysalis, butterfly Egg, chick, adult</p> <p>Find out about and describe the basic needs of animals, including humans, for survival. Pupil will know that all animals need: Food Shelter Warmth Sleep Exercise Water</p> <p>Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</p>	<p>Identify that animals, 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.</p> <p>Pupils will: Build on the food groups introduced in year 2 and add: fats, minerals and vitamins. Pupils will know that vitamin A and D come from: fatty fish, tuna, eggs and mushrooms. Vitamin C from citrus fruits, tomatoes, brussels, broccoli, potatoes. Fats come from: fatty meats, milk, cheese, butter, cakes, fried food.</p> <p>Identify that humans and some other animals have skeletons and muscles for support, protection and movement. Pupils will: Know and understand the purpose of a skeleton: to protect, support and enable movement. Pupils will identify and name: ribs, spine, humerus, ulna and radius, tibia and fibula and femur, skull.</p> <p>Pupils will: use these bones to:</p>

<p>Pupils will name and label: Head, arms, legs, feet, tummy, hands, nose, eyes, mouth, ears, fingers, toes</p>	<p>Pupils will name and label: Eyebrows, eyelashes, nostrils, cheeks, teeth, neck, shoulders, elbows, ankles, knees, thumb</p>	<p>How the animal moves. Look at texture and any close observations that the children make.</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>Pupils will name and label: chest, hips, waist, nails, shins, thighs, buttocks, calves</p>	<p>Pupils will: In this year group, children will learn about carbohydrates used for growth and energy and Protein for growth and repair Fruit and veg for good health Sugars/treats –limited Milk and dairy for healthy bones and teeth.</p> <p>Importance of exercise for a healthy heart and muscles.</p>	<p>recognise and name the 3 different joints that enable movement: Hinge, ball and socket and gliding joints.</p> <p>Pupils will: Recognise that all vertebrates have an endoskeleton but recognise animals that have an exoskeleton and a hydro-static skeleton.</p> <p>Pupils will: Recognise main muscle groups that work alongside the main bones to enable movement. Biceps and triceps Quadriceps and hamstrings Use the above alongside the elbow and knee joints to explain movement.</p> <p>Pupils will: Name and recognise voluntary and involuntary movements.</p>
<p><u>Scientist:</u></p>	<p><u>Scientist:</u></p>	<p><u>Scientist:</u></p>	<p><u>Scientist:</u></p>	
<p>Enrichment:</p>	<p>Enrichment: Zoo Lab</p>	<p>Enrichment:</p>	<p>Enrichment:</p>	
<p><u>Year 4</u> Describe the simple functions of the basic parts of the digestive system in humans.</p>	<p><u>Year 5</u> Describe the changes as humans develop to old age.</p>	<p><u>Year 6</u> Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood</p>	<p><u>Year 7</u> <u>Key Concept:</u> Organisms are made out of one or more cells, which need a supply of energy and molecules to carry out life processes.</p>	

<p>mouth, tongue, teeth, oesophagus, stomach and small and large intestine, rectum, anus</p> <p>Identify the different types of teeth in humans and their simple functions . Canines, molars, incisors, pre-molars.</p> <p>Construct and interpret a variety of food chains, identifying producers, predators and prey.</p> <p>Pupils will: Look at carnivore and herbivores and their teeth. Suggest reasons why they are different. Construct food chain identifying producer, primary consumers, secondary consumers, tertiary consumers, apex predators</p>	<p>Draw time lines of the main stages of development: baby (1-2) toddler (1-3), child (4- 12, adolescent (13-19, young adult (20-40), middle age (40-60), old age.</p> <p>Describe the main changes, including puberty.</p>	<p>Pupils will know the function and name:</p> <p>Blood vessels, veins, arteries, heart, lungs, capillaries</p> <p>Pupils will understand how the heart works alongside the lungs to take in oxygen and excrete carbon dioxide.</p> <p>Use oximeters to measure the amount of oxygen in the blood after and before exercise.</p> <p>Measure this over time as fitness improves, following exercise. Collect data and analyse</p> <p>Describe the ways in which nutrients and water are transported within animals, including humans.</p> <p>Pupils will understand the role of blood as a transporter of oxygen, food (nutrients) and water. It also transports waste products like carbon dioxide out of the body.</p> <p>Pupils will know that:</p> <p>The heart is a muscle that pumps blood to all parts of the body.</p> <p>Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.</p>	<p>Gas Exchange Systems The structure and functions of the gas exchange system in humans.</p> <p>Pupils will understand that: Organisms are made of one or more cells, which need a supply of energy and molecules to carry out life processes.</p> <p>The mechanism of breathing to move air in and out of the lungs, using a pressure model to explain the movement of the gases, including simple measurements of lung volume.</p> <p>The impact of exercise, asthma and smoking on the human gas exchange system.</p> <p>The content of a healthy human diet,: Carbohydrates, lipids (fats and oils), proteins, vitamins, minerals, dietary fibre and water and why each is needed.</p> <p>Pupils will understand that: Organisms are made of one or more cells, which need a supply of energy and molecules to carry out life processes.</p> <p>The consequences of imbalance in the diet, including obesity, starvation and deficiency diseases.</p>
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<u>Scientist:</u> Linda Brown Black	<u>Scientist:</u>	<u>Scientist:</u> Alexander Fleming, Miliam Krajíček. Jan Jansky, Ibn al Nafis	<u>Scientist:</u>
Enrichment: Medical Mavericks: Digestion	Enrichment:	Enrichment: Medical Mavericks: Circulation and fitness	Enrichment:
<u>Possible careers:</u> Sports analyst, asthma nurse, doctor, athlete, dietician, gastro surgeon, baker, gardener, farmer, food scientist., evolutionary biologist, archaeologist, palaeontologist			
<u>Common misconceptions</u>			

Year groups	Vocabulary/Statements
Birth to 3	<ul style="list-style-type: none"> • Explore natural materials, indoors and outside. • Make connections between the features of their family and other families. • Notice differences between people
Nursery	egg, chick, bird, caterpillar, cocoon, chrysalis, butterfly, frog spawn, tadpole, froglet, frog, grow, change, die, names of animals and their young, fur, feathers, scales, tail, wings, beak, claws, paws, hooves, swim, walk, run, jump, fly, patterns, spots, stripes, grow, change, baby, toddler, child, adult, old person, smell, taste, touch, feel, hear, see, blind, deaf
Reception	names of animals, live, on land, in water, jungle, desert, North Pole, South Pole, sea, hot, cold, wet, dry, snow, ice, hair (e.g. black, brown, dark, light, blonde, ginger, grey, white, long, short, straight, curly), eyes (e.g. blue, brown, green, grey), skin (e.g. black, brown, white), big/tall, small/short, bigger/smaller, baby, toddler, child, adult, old person, old, young, brother, sister, mother, father, aunt, uncle, grandmother, grandfather, cousin, friend, family, boy, girl, man, woman
Year 1	head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves, names of animals experienced first-hand from each vertebrate group, parts of the human body including those within the school's RSE policy, senses, touch, see, smell, taste, hear, fingers, skin, eyes, nose, ears, tongue
Year 2	offspring, reproduction, growth, baby, toddler, child, teenager, adult, old person, names of animals and their babies (e.g. chick/chicken, kitten/cat, caterpillar/butterfly), survive, survival, water, food, air, exercise, heartbeat, breathing, hygiene, germs, disease, food types (e.g. meat, fish, vegetables, bread, rice, pasta, dairy) living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed, water, air, survive, survival (Y2 - Living things and their habitats)
Year 3	nutrition, nutrients, carbohydrates, sugars, protein, vitamins, minerals, fibre, fat, water, skeleton, bones, muscles, joints, support, protect, move, skull, ribs, spine
Year 4	digestive system, digestion, mouth, teeth, saliva, oesophagus, stomach, small intestine, large intestine, rectum, anus, incisor, canine, molar, premolar, herbivore, carnivore, omnivore, producer, predator, prey
Year 5	puberty life cycle, foetus, baby, child, adolescent, adult, reproduce, sexual, fertilises, egg, live young (Y5 - Living things and their habitats)
Year 6	heart, pulse, rate, pumps, blood, blood vessels, transported, lungs, oxygen, carbon dioxide, cycle, circulatory system, diet, drugs, lifestyle, veins, arteries, capillaries, oxygenated, de-oxygenated,
KS3	Reproduction in humans (as an example of a mammal), including the structure and function of the male and female reproductive systems, menstrual cycle (without details of hormones), gametes, fertilisation, gestation and birth, to include the effect of maternal lifestyle on the foetus through the placenta <ul style="list-style-type: none"> • The consequences of imbalances in the diet, including obesity, starvation and deficiency diseases • The effects of recreational drugs (including substance misuse) on behaviour, health and life processes

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| | <ul style="list-style-type: none">• The structure and functions of the gas exchange system in humans, including adaptations to function• The mechanism of breathing to move air in and out of the lungs• The impact of exercise, asthma and smoking on the human gas exchange system |
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