St Mark's CE Primary School Science Curriculum Map: Animals (including Humans)



Year	National Curriculum	Sticky Knowledge	Vocab		
R	Year A Autumn Looking at our bodies and unders skeleton How we are similar/different Year A Summer	Year B Autumn tanding we have a Looking at our bodies and skeleton How we are similar/differ Year B Summer	ent .		
1	• What do humans need to live? • Looking at which animals lay eggs/have babies How does our body help us to see, hear, touch, taste and smell? (Autumn 1)				
	Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.	The basic body parts are the head, arms, legs, nose, eyes, ears, mouth, hands and feet. The five senses are hearing, sight, smell, taste and touch. Ears are used for hearing, eyes are used to see, the nose is used to smell, the tongue is used to taste and skin gives the sense of touch.	Head Arms Legs Hands Sight Hearing Smell Touch Taste Sense Explore		
1	What different animals are there and what do they eat? (Spring 1)				
	Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals Identify and name a variety of common animals that are carnivores, herbivores and omnivores Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)	 Animals are living things. Animals can be sorted and grouped into six main groups: fish, amphibians, reptiles, invertebrates, birds and mammals. Different animal groups have some common body parts, such as eyes and a mouth, and some different body parts like fins, wings. Carnivores eat other animals (meat), herbivores eat plants, omnivores eat other animals and plants. 	Fish Mammal Reptile Amphibian Bird Wild Tame Herbivore Carnivore Omnivore Diet Structure Scales Gills Webbed feet Group Features		
2	How can I stay healthy? (Spring 1)				
	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.	Human offspring go through different stages as they grow to become adults. These include baby, toddler, child, teenager, adult and elderly. Animals, including humans need water, food, air and shelter to survive. A healthy lifestyle includes exercise, good personal hygiene, good quality sleep and a balanced diet. Risks associated with an unhealthy lifestyle include obesity, tooth decay and mental health problems.	Offspring Baby Adult Life cycle Toddler Child Teenager Adult Middle Age Elderly Survival Needs Healthy Diet Exercise Energy Carbohydrates Proteins Fats		

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		T	Oile		
			Oils Balanced		
			Nutrition		
			Hygiene		
			Germs		
3	How do our skeletons and muscles work together to help us move? (Autumn 2)				
	 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 Identify that humans and some other animals have skeletons and muscles for support, protection and movement. 	 Animals, including humans cannot make their own food and have to get nutrition from what they eat. It is important to have a balanced diet made up of the main food groups, including carbohydrates, proteins, fruit and veg, dairy products and alternatives, and fats and spreads. Humans need to stay hydrated by drinking water. Humans have a skeleton and muscles for movement, support and protecting organs. Major human bones include the skull, ribs, spine, humerus, ulna, radius, pelvis, femur, tibia and fibula. Major human muscle groups include biceps, triceps, abdominals, gluteals, hamstrings and quadriceps Some animals have skeletons for support, movement, protection. Endoskeletons are those found inside some animals, such as cats and horses. Exoskeletons are those found on the outside of some animals, such as beetles and flies. Some animals have no skeleton, such as 	Skeleton Protect Support Organs Skull Ribs Patterns Similarities Differences Endoskeleton Exoskeleton Muscles Tendons Joints Biceps Triceps Fibre Saturated fats Unsaturated fats Vitamins Minerals Healthy Unhealthy Balanced diet		
	144 . 1	slugs and jellyfish.	4)		
4	• • • • • • • • • • • • • • • • • • • •	pens to the food we eat? (Summer	•		
	Describe the simple functions of the basic parts of the digestive system in humans Identify the different types of teeth in humans and their simple functions Construct and interpret a variety of food chains, identifying producers, predators and prey.	 The digestive system is responsible for digesting food and absorbing nutrients and water. The main parts of the digestive system are the mouth, oesophagus, stomach, small intestines, large intestines and rectum. There are four different types of teeth: incisors, canines, premolars and molars. Incisors are used for cutting. Canines are used for tearing. Premolars and molars are used for grinding and chewing. Carnivores, herbivores and omnivores have characteristic types of teeth. Herbivores have many large molars for grinding plant material. Carnivores have large canines for killing their prey and tearing meat. Regular teeth brushing, limiting sugary foods and visiting the dentist are important for good oral hygiene. Food chains show what animals eat within a habitat and how energy is passed on over time. All food chains start with a producer, typically a green plant. Changes within a food chain, such as population changes. or an abundance or lack of one food type, have an impact on the entire food chain and web. 	Oesophagus Pancreas Small intestine Large intestine Gall bladder Rectum Anus Acids Enzymes Bile Absorbed Faeces Canine Incisor Molar Premolar Function Tooth decay Enamel Gum Nerves Root Food chain Producer Consumer Predator Prey		

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5	How different will you be when you are as old as your grandparents?				
	(Summer 2)				
		 Humans go through characteristic stages as they develop towards old age. These stages include baby, infant, toddler, child, adolescent, young adult, adult and senior citizen. Each stage has similarities and differences to the stages before and after it. Senses such as our hearing, sight and reflexes are affected by aging. It is important that we stay healthy as we age. As we get older, staying healthy helps our bodies stay strong and our brains stay sharp, so we can keep doing the things we enjoy. 	Toddler Adolescent Elderly Childhood Survey Adulthood Data collection Old age Senses Aging Healthy lifestyle		
6	How does your heart power your body and keep you healthy? (Autumn 1)				
	Identify and name the main parts of the human circulatory system and describe the functions of the heart, blood vessels and blood Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function Describe the ways in which nutrients and water are transported within animals including humans	 The role of the circulatory system is to transport oxygen, water and nutrients around the body. The circulatory system includes the heart, blood vessels and blood. The heart pumps blood through blood vessels and around the body. There are three types of blood vessel: arteries, veins and capillaries. They each have a different-sized hole (lumen) and walls. The blood carries gases (oxygen and carbon dioxide), water and nutrients to where they are needed. Red blood cells carry oxygen and carbon dioxide around the body. Blood also contains white blood cells, which protect body from infection. Lifestyle choices can have a positive (exercise and eating healthily) or negative (drugs, smoking and alcohol) impact on the body. 	Artery Vein Circulation Oxygenated Deoxygenated Red blood cells White blood cells Platelets Plasma Heart rate Pulse Cardiovascular Exercise Lungs Carbohydrates Proteins Fats Vitamins Minerals Drugs Alcohol Medicine Risk		