

By the end of	ANIMALS, INCLUDING HUMANS	PoS suggested
	Progression in Key Concepts	year
Key Stage 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) Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. 	Year 1
	 Notice that animals, including humans, have offspring which grow into adults Find out about and describe the basic need 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. 	Year 2
Key Stage 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. 	Year 3
	 Describe the simple functions of the 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. 	Year 4
	Describe the changes as humans develop to old age.	Year 5
	 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. 	Year 6



The skeletal and muscular systems

- Recognise the structure and functions of the human skeleton, to include support, protection, movement and making blood cells
- Recognise the idea of biomechanics the interaction between skeleton and muscles, including the measurement of force exerted by different muscles
- Recognise the function of muscles and examples of antagonistic muscles.

Nutrition and digestion

- Recognise the content of a healthy human diet: carbohydrates, lipids (fats and oils), proteins, vitamins, minerals, dietary fibre and water, and why each is needed
- Carry out calculations of energy requirements in a healthy daily diet
- Recognise the consequences of imbalances in the diet, including obesity, starvation and deficiency diseases
- Identify the tissues and organs of the human digestive system, including adaptations to function and explain how the digestive system digests food (enzymes simply as biological catalysts)
- Recognise the importance of bacteria in the human digestive system
- Describe how plants make carbohydrates in their leaves by photosynthesis and gain mineral nutrients and water from the soil via their roots.

Key Stage 3

Gas exchange systems

- Recognise the structure and functions of the gas exchange system in humans, including adaptations to function
- Describe the mechanism of breathing to move air in and out of the lungs, using a pressure model to explain the movement of gases, including simple measurements of lung volume
- Recognise the impact of exercise, asthma and smoking on the human gas exchange system
- Recognise the role of leaf stomata in gas exchange in plants.

Reproduction

- Describe reproduction in humans (as an example of a mammal), including:
 - the structure and function of the male and female reproductive systems.
 - o menstrual cycle (without details of hormones),
 - o gametes,
 - o fertilisation,
 - gestation and birth (to include the effect of maternal lifestyle on the foetus through the placenta).

Health

Recognise the effects of recreational drugs (including substance misuse) on behaviour, health and life processes.

Year 7, 8 or 9