



Science Knowledge Organiser

Year: 3 Term: 4 Topic: Animals including humans



Prior knowledge/key knowledge

Year 2 prior knowledge. 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.

How do plants and animals obtain food? Identifying and explaining the difference between animals and plants – understanding why they need food.

How do humans ensure they have the right nutrients in their diet? Exploring nutrient and food groups – deciding what the balance for humans could and should be.

What are skeletons? Can I identify different types? Identifying animal and human skeletons – how are they the same/different? Have there been any adaptations to their skeletons?

What are the main bones in the human body? Naming the main bones in the human skeleton – explaining how the skeleton protects, supports and helps the body to move.

How do muscles work? Explaining how pairs of muscles move to make movement possible.

Vocabulary

nutrients	are compounds in foods essential to life and health
skeleton	is the hard structure that protects the internal organs of a living thing
muscles	Muscle is a soft tissue found in most animals. Muscles function to produce force and motion.
movement	A change or development – movement of the body
adaptions	Changes to be better suited to an environment e.g. thicker fur for cold
evolution	The change in a species over several generations – making adaptations to their environment
Voluntary/In voluntary movement	Muscles under conscious control you are directing them or unconscious automatically happens- knee flick
Endoskeleton	an internal skeleton, such as the bony or cartilaginous skeleton of vertebrates
Exoskeleton	a rigid external covering for the body in some invertebrate animals
Invertebrate	an animal lacking a backbone
Vertebrate	An animal with a backbone

Key skills /investigative focus

Investigative focus	Investigation focus - Research Make a working muscle. How can you make your muscle stronger?
Key skill	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.
Key skill	Identify that humans and some other animals have skeletons and muscles for support, protection and movement.

Big Questions/Challenging Perceptions



How do you know the person next to you is alive?

