

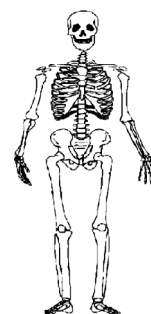
All children – regardless of gender, starting point or background – will have the opportunity to engage with a high-quality science education. They will be equipped with the knowledge, skills and vocabulary to understand how science can be used to explain what is occurring, predict how things will behave and analyse caused. We intend to inspire a sense of enjoyment and curiosity about science.

Animals, including Humans

Igniting Prior Knowledge:

Year 2

- Animals, including humans, have offspring which grow into adults.
- In humans and some animals, these offspring will be young, such as babies or kittens, that grow into adults.
- In other animals, such as chickens or insects, there may be eggs laid that hatch to young or other stages which then grow to adults.
- The young of some animals do not look like their parents e.g. tadpoles.
- All animals, including humans, have the basic needs of feeding, drinking, and breathing that must be satisfied in order to survive.
- To grow into healthy adults, they also need the right amounts and types of food and exercise.
- Good hygiene is also important in preventing infections, viruses and illnesses such as Covid-19.
- Increasing levels of exercise is important for physical and mental health, particularly during National lockdowns.



New Knowledge:

- Humans, and some other animals, have skeletons and muscles which help them move and provide protection and support.
- Some animals have their skeletons on the inside of their bodies and some have their skeleton on the outside (exoskeleton) e.g. crabs.
- There are more bones in a new born baby (270) than an adult (206) because some bones fuse together.
- The human skeleton consists of several different bones e.g. skull and jaw; ribcage, spine, pelvis, leg (femur, fibula, tibia), knee cap, ankle, toes, arm (humerus, radius, ulna), wrist, hand, fingers.
- Animals with a spine are called vertebrates. Animals without a spine are called invertebrates.
- Humans have different types of joint, pivot (neck), ball and socket (hip) and hinge (elbow, knee).
- Human joints have pairs of muscles, as one muscle in the pair contracts the other relaxes to move the joint.
- Animals, unlike plants which can make their own food, need to eat in order to get the nutrients they need.
- Food contains a range of different nutrients – carbohydrates (including sugars), protein, vitamins, minerals, fats, sugars, water – and fibre that are needed by the body to stay healthy.
- A piece of food will often provide a range of nutrients.
- For a healthy diet you need to eat a range of foods from each food types (see Eatwell guide).

Summer 1

Key Vocabulary:

- Nutrition,
- Nutrients,
- Carbohydrates
- Sugars
- Protein
- Vitamins
- Minerals
- Fibre
- Fat
- Water
- Skeleton
- Exoskeleton
- Vertebrate
- Invertebrate
- Bones
- Muscles
- Support
- Protect
- Move
- Skull
- Ribs
- Spine
- Pelvis
- Femur
- Fibula
- Tibia
- Humerus
- Radius
- Ulna
- Muscles
- Joints
- Ball and socket
- Hinge joint
- Contract
- Relax
- Balanced diet