

Science Knowledge Organiser

Topic: Animals including humans

Year: 3/4 (LKS2)

Strand: Biology

What should I already know?

- That humans need the right types of food to survive. Some food we eat is healthy and others are unhealthy.
- Animals and humans are either herbivores (plant eaters), carnivores (meat eaters) or omnivores (eat plants and meat).
- Animals and humans cannot make their own food, they must get all of their nutrients from what they eat.
- There are 5 main food groups that food is divided into.
 - Carbohydrates - Protein - Milk and Dairy
 - Fruit and Vegetables - Fats and Sugars

Vocabulary

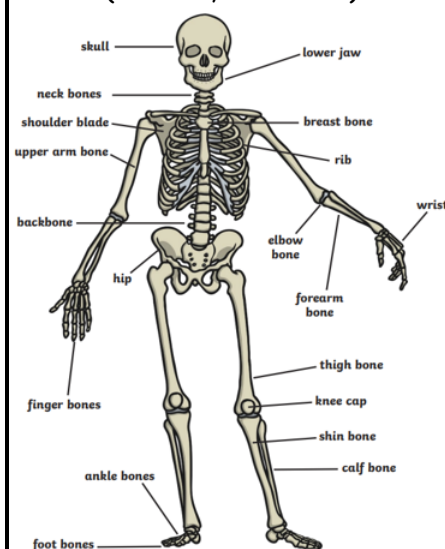
carbohydrates	A food group which can provide you with slow releasing energy.
dairy	This food group can provide you with calcium to support healthy bones and
fats and sugars	A food group that contains high amounts of fat or sugar and should make a small portion of your diet.
fruits and vegetables	This food group will provide you with vitamins essential for your health.
protein	A food group which can help build muscle.
skeleton	The name of all of the bones inside the body.
endoskeleton	A skeleton inside the body.
exoskeleton	A skeleton on the outside of the body.
hydrostatic skeleton	A very flexible skeleton.
muscles	Tissue in the body that helps us to move.

What will I know by the end of the unit?

Different animals have different skeletal structures. They are either have an **endoskeleton**, **exoskeleton** or **hydrostatic skeleton**.

Humans all have a **skeleton** and **muscles**. They give us support, protection and movement.

- Bones for support:
 - Spine - Pelvis
- Bones for protection:
 - Skull (brain) - Rib cage (lungs, heart and liver)
 - Spine (spinal nerves) - Pelvis (bladder, intestines)



Key Questions/Investigations

Classifying and Grouping: Identifying and grouping animals with and without skeletons. Compare and contrast the diets of different animals (including their pets) and decide ways of grouping them according to what they eat

Survey/Pattern Seeking: Does the length of your arm affect how far you can throw something?

Secondary Sources: Research nutrition of restaurant/takeaway meals and design meals based on what they find out