

Scientist



Wilhelm Rontgen

(A German physicist who discovered X-rays.)

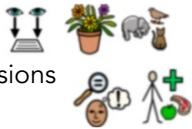


Zubair Haleem
(Academy physio at Arsenal)

Skills

I'm making systematic and careful observations like a physiologist.

I'm using results to make predictions and draw conclusions like a dietician.



Careers

Physiologist (a scientist who studies how plants and animals function)

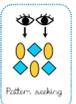
Dietician (develops nutrition advice to improve people's diets)

Enquiries



How does the skull circumference of a girl compare with that of a boy?

What would happen if one part is missing from a balanced diet?



Are you more likely to have bad eye sight and to wear glasses if you are older?

How do the skeletons of different animals compare?

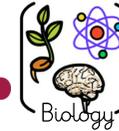


Why do different types of vitamins keep us healthy and which foods can we find them in?

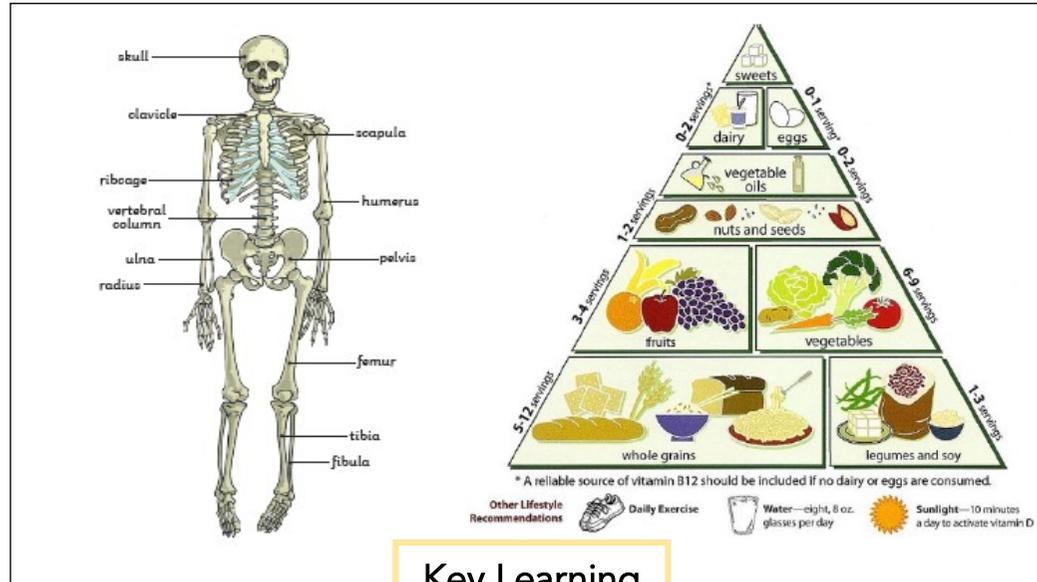
Y3 ANIMALS INCLUDING HUMANS



Main idea



Children will identify that humans and some other animals have skeletons and muscles for support, protection and movement. They will understand that humans need a certain amount of nutrition from what they eat and they cannot make their own food.



Key Learning

- Vertebrates are animals that have a backbone. These skeletons are called endoskeletons, this means that the skeletons are on the inside of the bodies. These skeletons grow with the bodies.
- When the skeleton exists outside the body, it is called an exoskeleton. An exoskeleton is a covering that supports and protects animals. These have to be shed and a new skeleton is grown.
- Skeletons provide support and shape to an animal's body, allow movement through the joints and protect vital organs.
- Humans cannot make their own food like plants do, we need to eat plants and animals to get our energy.
- Healthy, balanced diets lead to healthy, active people.
- There are several key nutrients our bodies need: protein, carbohydrates, fats,

What you should already know

There are five types of vertebrates: mammals, fish, reptiles, amphibians and birds.

Vertebrates are animals that have a backbone.

All animals need water, air and food to survive.

Some foods are healthier than others.

What comes next?

Year 4: describe the functions of the parts of the digestive system and identify different types of teeth.

Year 5: building on learning about life cycles, children will describe the changes in humans as they develop from birth to old age.

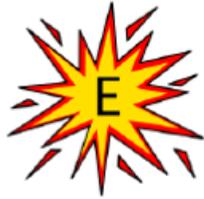
Key vocabulary

Balanced diet	Nutrition
Energy	Organs
Endoskeleton	Relax
Exoskeleton	Saturated fats
Hygiene	Skeleton
Joints	Starchy
Muscles	Tendons
Nutrients	

Year 3: Animals including humans



Balanced Diet: a variety of food that you regularly eat.



Energy: the ability and strength to do physical things.



Endoskeleton: the internal skeleton of an animal, especially the body skeleton of vertebrates.



Exoskeleton: the protective or supporting structure covering the outside of the body of many animals.



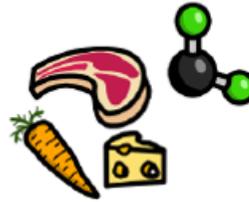
Hygiene: keeping yourself and your surroundings clean, especially in order to prevent illness or the spread of diseases.



Joints: the junction between two or more bones.



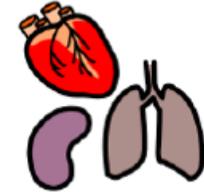
Muscles: something inside your body which connects two bones and which you use when you make a movement.



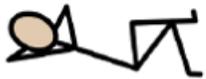
Nutrients: substances that help plants and animals to grow.



Nutrition: the process of taking food into the body and absorbing the nutrients in those foods.



Organs: a part of your body that has a particular purpose.



Relax: when a part of your body relaxes, or when you relax it, it becomes less stiff or firm.



Saturated Fats: types of fats, considered to be less healthy, that should only be eaten in small amounts.



Skeleton: the framework of bones in your body.



Starchy: foods that contain a lot of starch (a nutrient which gives you energy).

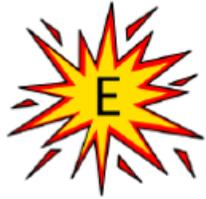


Tendons: a strong cord in a person's or animal's body which joins a muscle to a bone.

Year 3: Animals including humans



Balanced diet



Energy



Endoskeleton



Exoskeleton



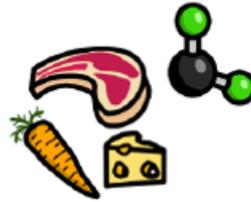
Hygiene



Joints



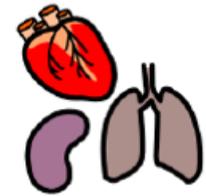
Muscles



Nutrients



Nutrition



Organs



Relax



Saturated fat



Skeleton



Starchy



Tendons