### 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 old-

How do the skeletons of different animals compare?



Research using

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

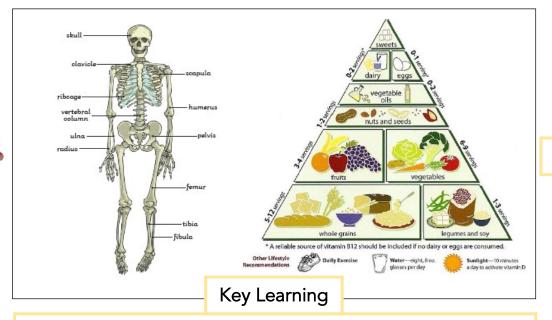
## **Y3 ANIMALS INCLUDING HUMANS**



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.



- 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



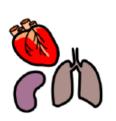
Muscles



Nutrients



Nutrition



Organs



Relax



Saturated fat



Skeleton



Starchy



Tendons