

EAGLES - SCIENCE

Knowledge Organiser – Autumn Term (1) 2021

Can humans make their own food?

No, humans gather, grow or hunt their food.

Can plants make their own food?

Yes, they use a process called photosynthesis to make their own food.

What does a human need to be healthy?

In order to stay healthy, a human needs:

- .To have a balanced diet of the right amount of different foods and drink
- .To exercise regularly
- .To be hygienic

What is energy?

Energy is the property that gives us strength

What is nutrition?

Nutrition is food necessary for health and growth.

What are nutrients?

Nutrients are chemicals that organisms need to grow

The Digestive System

How do our bodies break down food?

In order to use food, we must first break it down into substances that the various organs and cells in our body can use.

What are the major stages of the digestive system?

- 1. Chewing** – food is broken into little pieces to digest more easily
- 2. Swallowing** - muscles force food down the oesophagus until it gets to the stomach.
- 3. Stomach** - enzymes break down the food into things our body needs. The stomach kills a lot of bad bacteria, so we don't get sick.
- 4. Small Intestine** – continues to break down our food which is then absorbed from the intestine into our body through the blood.
- 5. Large Intestine** - Any food the body doesn't need or can't use is sent to the large intestine and later leaves the body as waste.

Animals including humans

What are the different types of nutrients and why do we need them?

Nutrient	Found in... (examples)	What it does/they do
carbohydrates		provide energy
protein		helps growth and repair
fibre		helps you to digest the food that you have eaten
fats		provide energy
vitamins		keep you healthy
minerals		keep you healthy
water		moves nutrients around your body and helps to get rid of waste

How much should we eat of each type of food?

The Food Pyramid

For adults, teenagers and children aged five and over



EAGLES - SCIENCE

Knowledge Organiser – Autumn Term (2) 2021

Animals including humans

What do humans and some animals have skeletons and muscles for?

Humans and some animals have skeletons and muscles for support, protection and movement.

What is the role of a skeleton?

Skeletons do three important jobs:

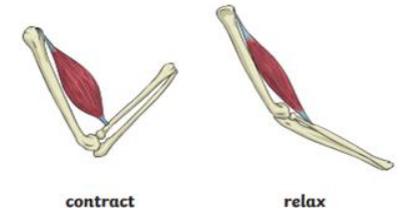
- Protect organs inside the body;
- Help us to move;
- Support the body and stop it from falling on the floor.

Why do we need muscles?

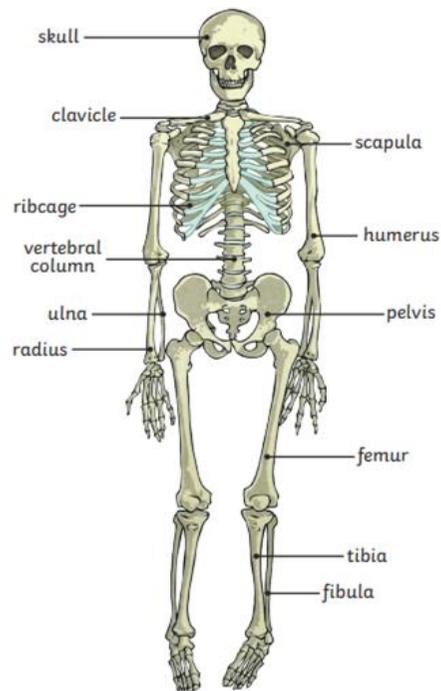
Muscles are soft tissues in the body that contract and relax to cause movement. They pull on your bones to make you move.

How do skeletal muscles work?

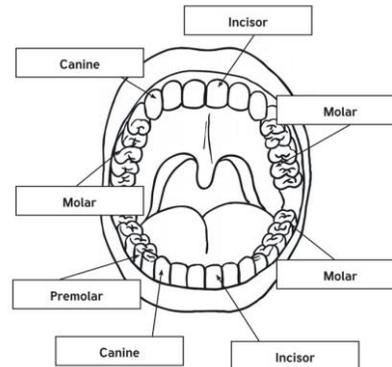
Skeletal muscles work in pairs to move the bones they are attached to by taking it in turns to contract (get shorter) and relax (get longer).



What are the different parts of The skeleton called?



What are the types of teeth in a human?



What is the job of each type of tooth?

- Incisors are teeth that cut food
- Canines are pointed teeth that tear food
- Premolars are like smaller molars and they crush and grind food
- Molars are teeth that grind food

What is a food chain?

A food chain shows what is being eaten by what

What is a producer? Producers make their own food. Plants are producers.

What is a consumer? Consumers get their food by eating plants or other animals.

What are predators? Predators are animals which eat other animals.

What are prey? Prey are the animals that the predators kill and eat.

