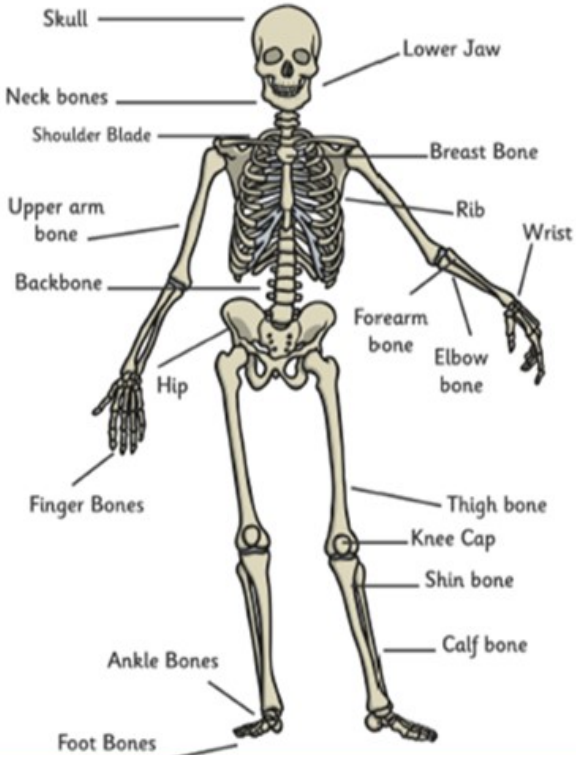
Healthy Humans

Knowledge Organiser

Vocabulary

Word	Meaning
carbohydrates	Provides the body with energy
contract	To get shorter
energy	Strength to be able to move and grow
fibre	Helps you to digest the food that you have eaten
healthy	In a good physical and mental condition
invertebrate	Animals without a backbone
joints	Areas where two or more bones fit
muscles	Soft tissue in the body that contract and relax to cause movement
nutrients	Foods that living things needs to stay alive and healthy
protein	Helps with growth and repair
saturated fats	Types of fats, considered to be less healthy, that should only be eaten in small amounts
tendons	Cords that join muscles to bones
unsaturated fats	Fats that give you energy, vitamins and minerals
vertebrate	Animals with backbones
vitamins	Substances found in foods which keep you healthy

The Skeleton



The skeleton of any living thing does three important jobs:

- Protect the organs inside the body
- Allow movement
- Support the body and stop it from falling on the floor.

There are 206 bones in the human skeleton. The wrists, hands, feet and ankles contain over 106 of the 206 bones.

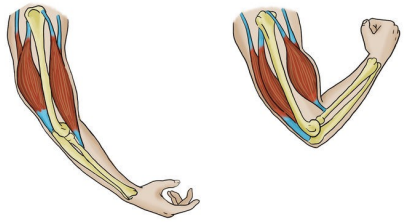
The femur (thigh bone) is the largest bone in the body while the stapes (stirrup bone) are the smallest bone in the body. This is one of 3 bones inside the ear that vibrate to enable us to hear. It is only 3mm in length.

- **Endoskeleton** - skeleton on the inside of the body.
- **Exoskeleton** - skeleton on the outside of the body.
- **Hydrostatic** skeleton is made up of a fluid-filled compartment in the body called a coelom, mainly found in soft-bodied animals.

Muscles

Muscles are attached to bones in the body by strong cords called tendons. Skeletal muscles work in pairs to move the bones they are attached to by taking turns to contract (get shorter) and relax (get longer).

Your muscles are what allow you to move. Everyone has over 600 of them in their body.



Science

Year 3 Spring Term

Healthy Humans

Healthy Eating

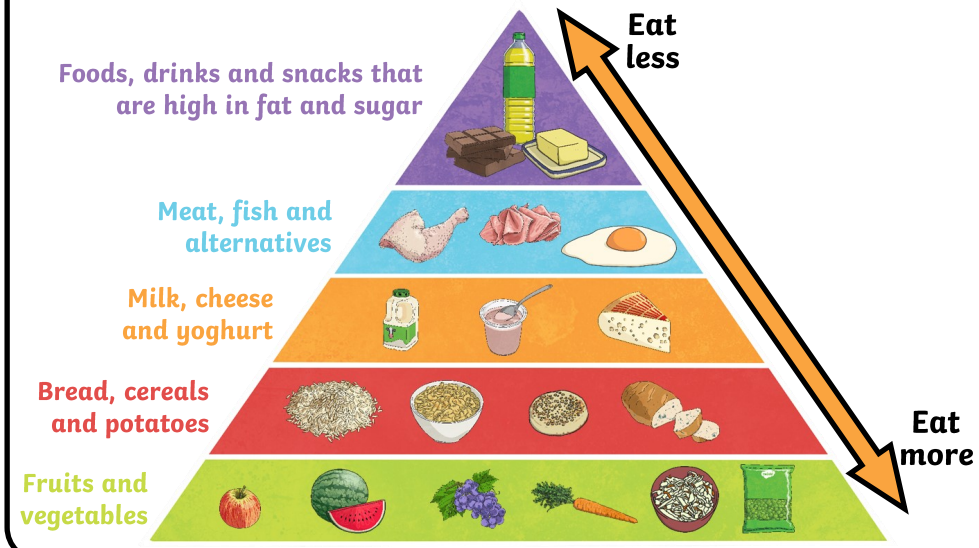
Living things need food to grow and to be strong and healthy. Plants can make their own food, but animals cannot.

To stay healthy, humans need to exercise, eat a healthy diet and be hygienic. Animals including humans need food, water and air to stay alive.

A balanced diet means we need to eat a range of different foods and the right amounts of different food types. Food types include:

- **Carbohydrates:** provide energy
- **Protein:** helps with growth and repair
- **Fibre:** helps you to digest the food that you have eaten
- **Fats:** provide energy
- **Vitamins:** keeps you healthy
- **Minerals:** keeps you healthy
- **Water:** moves nutrients around your body and helps to get rid of waste.

We can use the food pyramid to help us decide how much of each food group to eat.



Sugar

Eating fruit offers good stuff like vitamins, antioxidants and water, while sweets and desserts do not give us these things. Fruit has less sugar in it than snacks and treats do and it contains natural sugars which are not so bad for us.

- Half a cup of strawberries:
  3.5g of sugar
- Half a cup of strawberry ice cream:
  15g of sugar

Also, whole fruit has a lot of fibre, which actually slows down your body's digestion of glucose, so that you get just the right amount of energy you need and your body uses up the sugar before it can turn into fat.

Recommendations for sugar intake:

- **4 to 6 year olds:** 19g per day—5 sugar cubes
- **7 to 10 year olds:** no more than 24g per day—6 sugar cubes
- **Adults:** maximum of 30g—7 cubes.

Extending your learning

Things you could do at home to extend your learning:

1. Design a poster about the different muscles and their function in the body.
2. Design a food menu for a full day of healthy eating that includes breakfast, lunch and dinner.
3. Create a fact file about healthy eating or the skeleton to show everything you have learned.
4. Check out the sugar content of each of the items that go in to your shopping basket this week.
5. Make up an exercise routine that help to keep your muscles strong and your joints moving properly.