

Lower Key Stage 2 - Forest Academy
Knowledge organiser – Animals including Humans (Skeletons & Muscles)

Children will learn:

- To identify that animals, including humans, need the right types and amounts of nutrition, and that they cannot make their own food – they get nutrition from what they eat.
- To identify humans and some other animals have skeletons and muscles for support, protection and movement.

Key Vocabulary

healthy	In a good physical and mental condition.
nutrients	Substances that animals need to stay alive and healthy.
energy	Strength to be able to move and grow.
saturated fats	Types of fats, considered to be less healthy, that should only be eaten in small amounts.
unsaturated fats	Fats that give you energy, vitamins and minerals.

- 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.

Famous Scientist - Wilhelm Röntgen

Wilhelm Röntgen discovered X-rays. X-rays are powerful waves of energy. Like light, X-rays are a form of radiation. They are very useful because they can go through substances that light cannot. X-rays can show images, or pictures, of the inside of an object, such as a suitcase or the human body.



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

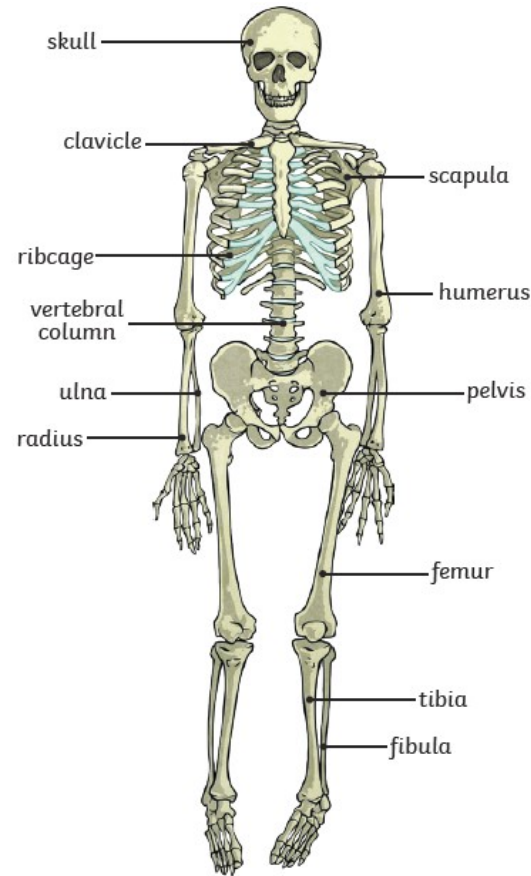
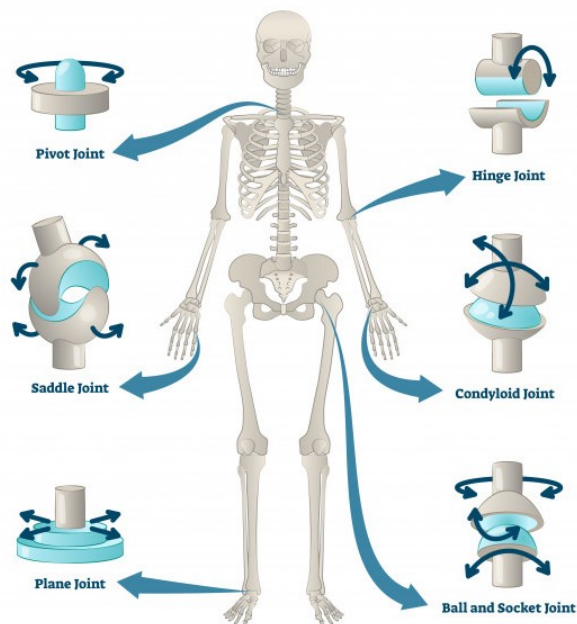
Key Vocabulary

vertebrate	Animals with back bones.
invertebrate	Animals without backbones.
muscles	Soft tissues in the body that contract and relax to cause movement.
tendons	Cords that join the muscles to bones.
joints	Areas where two or more bones are fitted together.

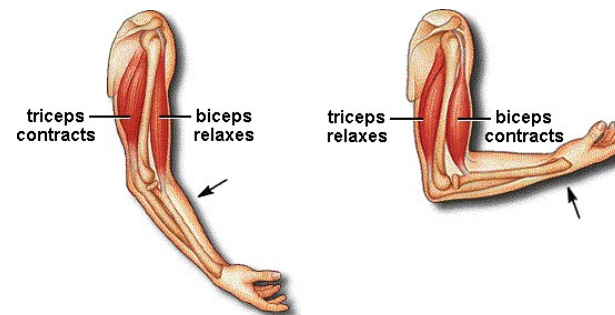
Skeletons do 3 important jobs:

1. protect organs inside the body;
2. allow movement;
3. support the body and stop it from falling on the floor.

TYPES OF JOINTS

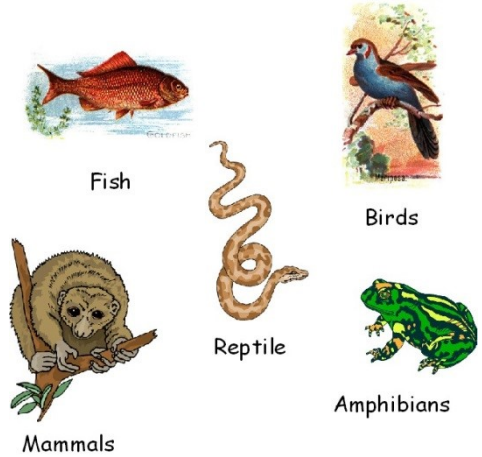


Skeletal muscles work in pairs to move the bones they are attached to by taking turns to contract (get shorter) and relax (get longer).



Vertebrates

Animals with backbones



Invertebrates

Animals without backbones

