

Working Scientifically Skills



WHO?

Marie Curie



Year 2

Animals inc. Humans

Biology

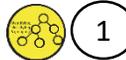


Vocabulary

| | | | |
|------------------|--|--------------|--|
| healthy | in a good physical and mental condition | vertebrate | animals with backbones |
| nutrients | substances that living things need to stay alive and healthy | invertebrate | animals without backbone |
| energy | strength to be able to move and grow | muscles | soft tissues in the body that contract and relax to cause movement |
| saturated fats | types of fats, considered to be less healthy, that should only be eaten in small amounts | tendons | ords that join muscles to bones |
| unsaturated fats | fats that give you energy, vitamins and mineral | joints | areas where two or more bones are fitted together |

WHAT?

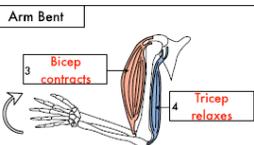
The **skeleton** is made of **bones, muscles, ligaments** and **tendons**. The skeleton **protects** the **organs** and **support** the **body**. Bones have common and scientific names.



1

Muscles and **tendons** **contract** and **relax** to help with movement. The **heart** is an **involuntary** muscle because it moves on its own, whereas our **biceps** and **triceps** are **voluntary** muscles because we choose when to move them. Doctors have a good understanding of muscles. Muscles enable us to move our body parts. Not all muscles are used at once. Muscles move in **pairs**.

2



We need a **variety** of different foods to stay **healthy**. There are food types (**proteins, vitamins and minerals, fats** and **oils, carbohydrates**) and we need a balance of these to stay **healthy**. If you have an **unbalanced** diet, this could mean you are **unhealthy**. Nutritionists must have a good idea of different food groups.



3



4

Animals, including humans, need the right types and amount of nutrition, and they cannot make their own food; they get **nutrition** from what they eat. Nutrition means **giving bodies** the food that they need in order to **survive**. All animals need a **balanced** diet. An animal's body is **adapted** so they are able to eat the **appropriate** food.

Vertebrates have a **backbone** (spine) and **invertebrates** do not.

All **vertebrates** have an **endoskeleton**. However, **invertebrates** can be divided again between those with an **exoskeleton** and those with a **hydrostatic** skeleton. Animals with **endoskeletons** have skeletons on the **inside** of their bodies. They **grow** with the animal. Animals with **exoskeletons** have their skeletons on the **outside**. They **shed** their skeleton and grow a new one. Animals with **hydrostatic** skeletons don't actually have any bones. They have **fluid-filled** compartment in their body called a **coelom**. Animals with **hydrostatic** skeletons are class as **invertebrates**.



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