## Plymouth Science

# **Knowledge Organiser**

## Year 3 **Animals Including Humans**

#### **VOCABULARY**

Vertebrate- An animal with a backbone inside their body.

**Bones-** The hard parts inside your body which form your skeleton.

**Skeleton-** The framework of bones in your body.

**Backbone (Spine) The** column of small, linked bones down the middle of your back.

Muscle- move the different parts of your body, inside and out. **Healthy-** feeling well and not suffering any illness.

**Exercise**- a physical activity to keep your body fit. Hygiene- how clean

something is.

**Disease-** an illness which affects people, animals or plants. bacteria or virus.

**Balanced diet-** Choosing foods in the right amounts from each of the food groups.

### What do we need to survive and be healthy?

**Balanced diet** (Food)



Water



Air

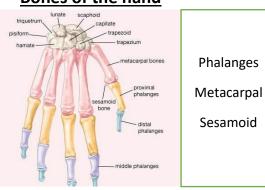


Exercise

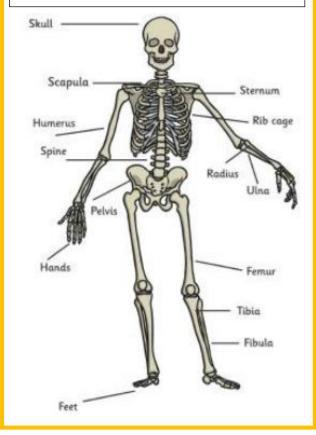


Hygiene

#### Bones of the hand



#### The Skeletal System.



### **Characteristics of Living Things:**

Movement

Respire (breathe)

Sensitive to the environment

Nutrients

Excrete (Get rid of waste/poo!)

Reproduce (have babies)

Grow.

### **Skeleton**

All mammals (including humas), birds, fish, reptiles and amphibians are vertebrates. This means they have a skeleton inside their bodies.

The human skeleton is made of bones and grows as we grow. Our skull protects our brain and our ribs protect our heart and lungs.

The skeleton bends at joints such as knees and ankles. Joints are where two or more bones join together.















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## Three types of skeleton.

#### Endoskeleton

#### Exoskeleton

#### Hydrostatic skeleton



Skeleton inside the body. As the animal grows so does the skeleton.



Skeleton is on the outside. They shed their skeleton. Skeleton does not grow with the animal, so it sheds it and grows a new one.



The skeleton does not consist of bones.

They are all invertebrates. They have fluid filled compartments in their body.

# Year 3 Animals Including Humans

#### Muscles

- Your body has over 650 muscles and may different types of joints to allow your bodies to move in different ways.
- They are attached to the skeleton to help us move. They either contract (bunch up) or relax (go back to normal) to move the bones.
- It takes 17 muscles to smile
- It takes 43 muscles to frown!

#### Drink plenty of water.

## Carbohydrates give us energy.

Proteins help our bodies repair themselves.

Fats help store energy for our bodies.

Fibre is important for helping us digest our food.

#### **A Balanced Diet**



Muscles in the body

Pectorals

Biceps

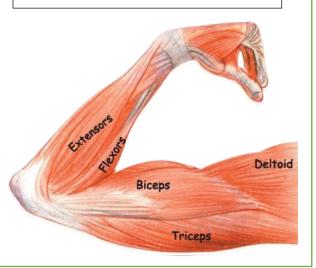
Abdominals

Quadriceps

Hamstring (back)

Calves (back)

#### Our arm muscles



#### **Nutrition**

Nutrition means getting the food they need to grow and be healthy.









