

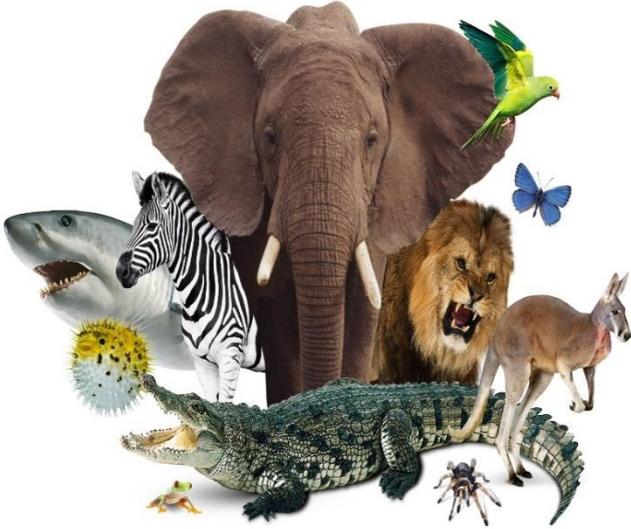


# ANIMALS including Humans



## the circulatory system, diet & exercise

### Recap



Humans and animals go through life stages, including birth, **growth**, **reproduction** and death.

Different foods contain various quantities of **carbohydrates**, **fats**, **proteins**, **fibre**, **vitamins** and **minerals**. It is important to have the right balance.

Humans (and many animals) have **skeletons**, **muscular systems** and **digestive systems**. You should know the basic parts and purposes of these systems for humans.

### The Circulatory System

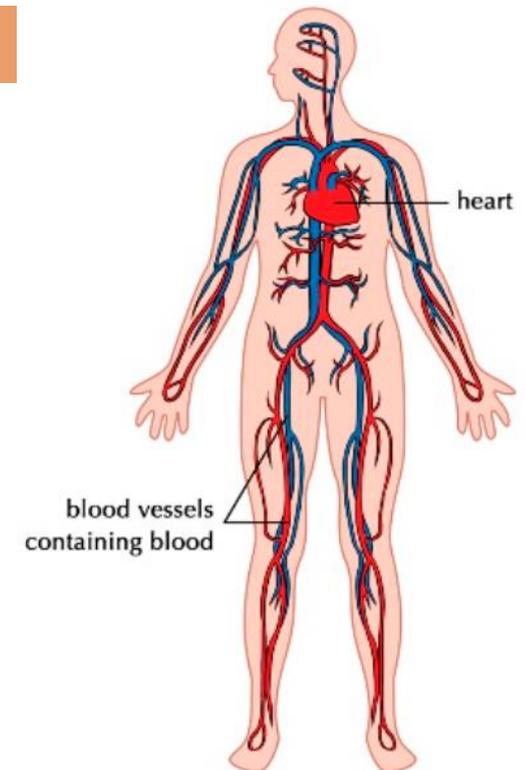
The **circulatory system** is your body's delivery system. It is made up of your heart, blood and blood vessels.

The human body needs a constant supply of blood to keep working. Blood delivers **oxygen** to all of the body's cells – without this, cells would die. The circulatory system gets blood (and the oxygen) all around your body.

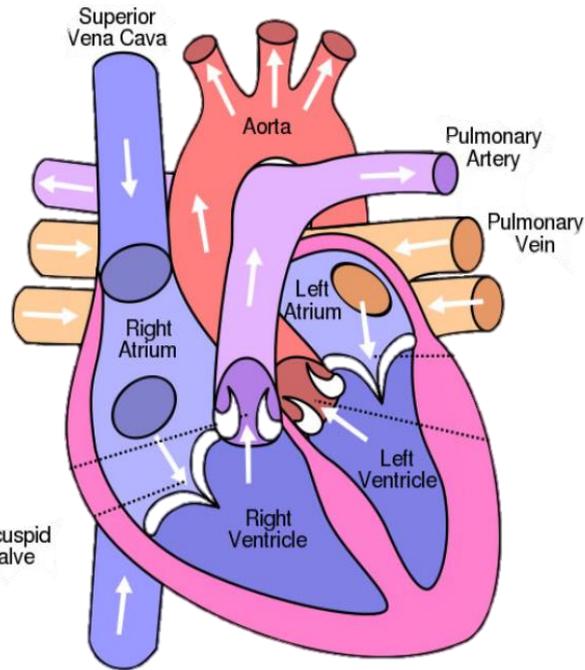
The heart pumps blood to the lungs, where it picks up oxygen. It is then returned to the heart.

The heart then pumps the oxygenated blood to the rest of the body.

**Arteries** are **vessels** that take blood away from the heart; **veins** are vessels that bring blood back to the heart.



# The Heart



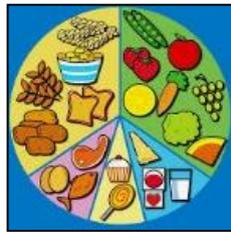
The circulatory system is centred on the heart, an **organ** that works constantly to pump blood around the body. Your feeling your **pulse** is a way of measuring your **heart rate**.

The heart is made up of four sections, called chambers. There are two sides to the heart (right and left).

The left side receives and sends blood from and to the lungs and the right side receives and sends it from and to the rest of the body.

Blood contains different types of cells whose functions are: transporting oxygen, hormones and **nutrients**; forming blood clots; removing waste and fighting infection.

# The impact of diet, exercise and drugs



A healthy, **balanced diet** can have a huge effect on a person's health. People who eat the right balance of fresh, healthy foods are less prone to chronic illnesses and diseases.



Regular **exercise** helps our bones and muscles to become stronger. It also helps to raise the **heart rate** making our hearts and lungs to become healthier.



A drug is a chemical that has an effect on your body. Some **drugs** are prescribed by doctors to make people healthy. Other drugs (like alcohol, cigarettes and illegal drugs) can have a dangerous effect on our health.

## Transportation of Water in the Body

**Rehydration** – water is drunk through the mouth.



**Absorption** – water is absorbed by the intestines and is carried in the bloodstream.



**Transportation** – water is taken in blood to different parts of the body.



**Excretion** – waste water is passed out as urine.