



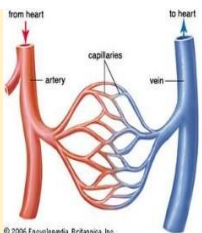
Year 6  
**Topic: Animals including humans**  
**Strand: Biology**

**What I should already know.**

- Which things are living and which are not.
- Classification of animals (e.g. amphibians, reptiles, birds, fish, mammals, invertebrates).
- Animals that are carnivores, herbivores and omnivores.
- Animals have offspring which grow into adults.
- The basic needs of animals for survival (water, food, air).
- The importance of exercise, hygiene and a balanced diet.
- Animals get nutrition from what they eat.
- Some animals have skeletons for support, protection and movement.
- The basic parts of the digestive system.
- The different types of teeth in humans.
- **Respiration** is one of the seven life processes.
- The life cycle of a human and how we change as we grow.

**What will I know by the end of the unit?**

**What is the circulatory system?**



The circulatory system is made of the heart, lungs and the blood vessels.

Arteries carry oxygenated blood from the heart to the rest of the body.

Veins carry deoxygenated blood from the body to the heart.

**Choices that can harm the circulatory system.**

- Some choices, such as smoking and drinking alcohol can be harmful to our health.

- Alcohol can cause short-term effects such as addiction and loss of control and long-term effects such as organ damage, cancer and death.

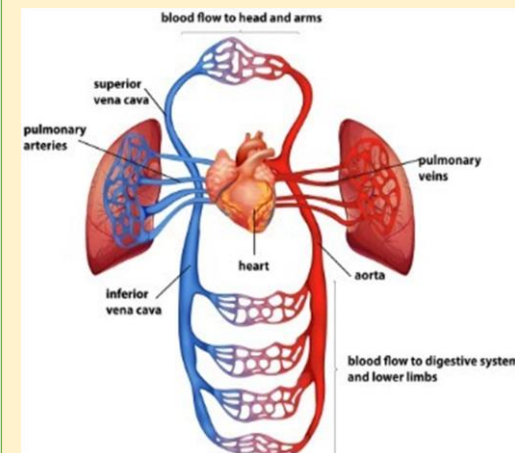
**Why is exercise so important?**  
 Exercise can:

- Tone our muscles and reduce fat.
- Increase fitness and makes you feel physically and mentally healthier.
- Strengthens the heart and improves lung function.
- Improves skin.

**Vocabulary**

<b>Aorta</b>	The main <b>artery</b> through which blood leaves your heart before it flows through the rest of your body.
<b>Arteries</b>	A tube in your body that carries <b>oxygenated</b> blood from your <b>heart</b> to the rest of your body.
<b>Atrium</b>	One of the chambers in the <b>heart</b> .
<b>Blood vessels</b>	The narrow tubes through which your blood flows. <b>Arteries, veins</b> and <b>capillaries</b> are <b>blood vessels</b> .
<b>Capillaries</b>	Tiny <b>blood vessels</b> in your body.
<b>Carbon dioxide</b>	A gas produced by animals and people breathing out.
<b>Circulatory system</b>	The system responsible for circulating blood through the body, that supplies <b>nutrients</b> and <b>oxygen</b> to the body and removes waste products such as <b>carbon dioxide</b> .
<b>Deoxygenated</b>	Blood that does not contain <b>oxygen</b> .
<b>Heart</b>	The <b>organ</b> in your chest that <b>pumps</b> the blood around your body.
<b>Lungs</b>	Two <b>organs</b> inside your chest which fill with air when you breathe in. They <b>oxygenate</b> the blood and remove <b>carbon dioxide</b> from it.
<b>Nutrients</b>	Substances that help plants and animals to grow.
<b>Organ</b>	A part of your body that has a particular purpose.
<b>Oxygen</b>	A colourless gas that plants and animals need to survive.
<b>Oxygenated</b>	Blood that contains <b>oxygen</b> .
<b>Pulse</b>	The regular beating of blood through your body. How fast or slow your <b>pulse</b> is depends on the activity you are doing.
<b>Respiration</b>	Process of respiring; breathing; inhaling and exhaling air.
<b>Veins</b>	A tube in your body that carries <b>deoxygenated</b> blood to your <b>heart</b> from the rest of your body.
<b>Vena cava</b>	A large <b>vein</b> through which <b>deoxygenated</b> blood reaches your <b>heart</b> from the body.
<b>ventricle</b>	One of the chambers in the <b>heart</b> .

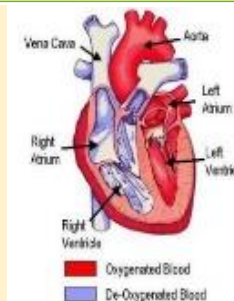
**Diagram  
 The Circulatory System**



1. The right **atrium** collects the **deoxygenated** blood from the body, **via** the **vena cava**. It sends the blood to the right **ventricle**.
2. The right **ventricle pumps** the **deoxygenated** blood to the **lungs**. Here the blood picks up **oxygen** and disposes of **carbon dioxide**.
3. The **lungs** send **oxygenated** blood back to the left **atrium** which pumps it to the left **ventricle**.
4. The left **ventricle** pumps the blood to the rest of the body, **via** the **aorta**.

**Diagram - The Heart**

The **heart** is composed of four chambers; the right **atrium**, the right **ventricle**, the left **atrium** and the left **ventricle**.



How often your **heart** pumps is called your **pulse**.