

**What I Should Already Know:**

- 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

**Subject Vocabulary:**

Fair test—A **fair test** is a **test** which controls all but one variable when attempting to answer a scientific question. Only changing one variable allows the person conducting the **test** to know that no other variable has affected the results of the **test**.

**Skills & Enquiry:**

- To make careful observations and link these to the knowledge they have.
- To investigate the effects of exercise on the circulatory system through conducting a fair test.

**Unit Specific Vocabulary:**

**Aorta** - the main artery through which blood leaves your heart before it flows through the rest of your body

**arteries** - a tube in your body that carries oxygenated blood from your heart to the rest of your body

**blood vessels** - the narrow tubes through which your blood flows. Arteries, veins and capillaries are blood vessels.

**capillaries** - tiny blood vessels in your body carbon dioxide a gas produced by animals and people breathing out

**deoxygenated**—blood that does not contain oxygen

**heart** - the organ in your chest that pumps the blood around your body

**lungs** - two organs inside your chest which fill with air when you breathe in. They oxygenate the blood and remove carbon dioxide from it.

**nutrients** - substances that help plants and animals to grow

**organ** - a part of your body that has a particular purpose

**oxygen** - a colourless gas that plants and animals need to survive

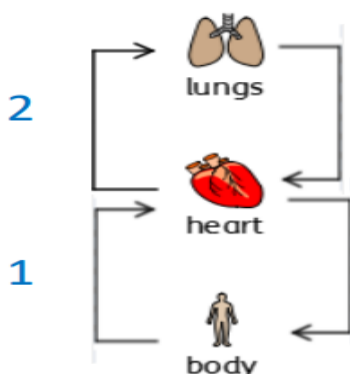
**oxygenated** - blood that contains oxygen

**pulse** - the regular beating of blood through your body. How fast or slow your pulse is depends on the activity you are doing.

**respiration** - process of respiring; breathing; inhaling and exhaling air. In KS3 science, this process is referred to as ventilation.

**vein** - a tube in your body that carries deoxygenated blood to your heart from the rest of your body

**vena cava** - a large vein through which deoxygenated blood reaches your heart from the body

**Key Facts :**

1. **Deoxygenated** blood is sent to the **heart** from the rest of the body.
2. This is then sent from the **heart** to the **lungs**. Here, the blood picks up **oxygen** and disposes of **carbon dioxide**.
3. **Oxygenated** blood is then sent back to the heart.
4. The **heart** sends the **oxygenated** blood back to the rest of the body.

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

What will I know by the end of the unit?	
What is the circulatory system?	<ul style="list-style-type: none"> <li>The <b>circulatory system</b> is made of the <b>heart</b>, <b>lungs</b> and the <b>blood vessels</b>.</li> <li><b>Arteries</b> carry <b>oxygenated</b> blood from the <b>heart</b> to the rest of the body.</li> <li><b>Veins</b> carry <b>deoxygenated</b> blood from the body to the <b>heart</b>.</li> <li><b>Nutrients, oxygen</b> and <b>carbon dioxide</b> are exchanged <b>via</b> the <b>capillaries</b>.</li> </ul>
Choices that can harm the circulatory system	<ul style="list-style-type: none"> <li>Some choices, such as smoking and drinking alcohol can be harmful to our health.</li> <li>Tobacco can cause short-term effects such as shortness of breath, difficulty sleeping and loss of taste and long-term effects such as lung disease, cancer and death</li> <li>Alcohol can cause short-term effects such as addiction and loss of control and long-term effects such as <b>organ</b> damage, cancer and death</li> </ul>
Why is exercise so important?	<p>Exercise can:</p> <ul style="list-style-type: none"> <li>tone our muscles and reduce fat</li> <li>increase fitness</li> <li>make you feel physically and mentally healthier</li> <li>strengthens the <b>heart</b></li> <li>improves <b>lung</b> function</li> <li>improves skin</li> </ul>

