#### THE CIRCULATORY SYSTEM

The **heart** sends red blood cells around your body It works like a pump, or two pumps in one. The right side of your heart receives blood from the body and pumps it to the lungs. This is where it picks up oxygen and returns back to the left side of the heart which pumps it out to the body. As it drops off oxygen around the body, it picks up carbon dioxide to take back to the lungs for the lungs to exhale (breathe out). The movement of the blood through the heart and around the body is called **circulation** and your heart is really good at it. It takes less than 1 minute to pump blood to every cell in your body.

The body's circulatory system is responsible for transporting materials throughout the entire body. It **delivers nutrients**, **water and oxygen** to your billions of body cells and **carries away wastes** such as carbon dioxide that body cells produce. It is an amazing highway that travels through your entire body connecting all your body cells.



# Autumn Term

## **ANIMALS INCLUDING HUMANS**

#### THE HEART

Your heart is really a muscle. It's located a little to the left of the middle of your chest and it's about the size of your fist.

#### KEEPING HEALTHY

 Diet - fatty foods can clog blood vessels and cause a heart attack.

• Exercise - doing an hour of exercise has a huge positive effect on your body. It improves your blood circulation and fitness and has as other benefits such as strengthening your bones.

 Drugs- a 'drug' is something that you eat or drink that has an effect on your body. Drugs can be medicines that are help your body but they can also be substances, such as alcohol or chemicals found in cigarettes, that have a very bad effect on your body.

 Lifestyle—just a few simple changes to your lifestyle can effect your body in a good or bad way.
Lifestyle means the way you live your life and this could be anything from your hobbies to what you enjoy doing as a family. Choosing to exercise instead of sitting in front of the television will have a positive effect on your health.

### **OLSE** Science Knowledge Organiser

#### HOW BLOOD CIRCULATES

Once it leaves the heart, the blood moves through many tubes called **blood vessels**. These blood vessels are attached to the heart. The blood vessels that carry blood away from the heart are called **arteries**. The ones that carry blood back to the heart are called **veins**.

Capillaries are tiny blood vessels which take the

blood into organs and tissues. Nutrients (made from eating carbohydrates, fats and proteins) allow your body to perform daily activities. They are absorbed into your bloodstream and passed to parts of your body through the capillaries.

