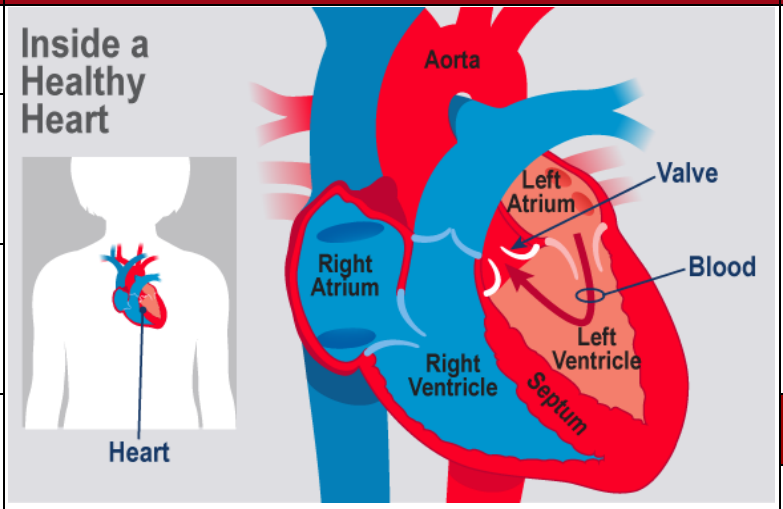
Science – Circulatory System – Year 6 – Summer 2

Vocabulary Top Ten:

addictive	when you feel you cannot live without something
arteries	carry blood away from the heart and transport oxygen and useful nutrients to the body's cells
blood	a red fluid that carries oxygen, water and nutrients and removes waste products like carbon dioxide
blood vessels	series of tubes inside your body that move blood to and from the heart
capillaries	tiny blood vessels which take the blood into organs and tissues
circulatory system	a network consisting of blood, blood vessels, and the heart
deoxygenated	to be depleted from oxygen
heart	an organ in the chest that pumps blood around the body
oxygenated	to be enriched with oxygen
veins	takes blood back to the heart where it is pumped to the lungs to pick up new oxygen again

Heart



Circulatory System

1. The heart first pumps blood to the lungs where the blood picks up oxygen from the air that you have breathed in.
2. The blood (carrying oxygen) then travels back to your heart.
3. The heart gives the blood a second push. Arteries carry blood away from the heart and transport oxygen and useful nutrients to the body's cells. When blood is pumped through your arteries, you can feel your pulse.
4. The veins take blood back to the heart where it is pumped to the lungs to pick up new oxygen again.

Blood

Blood contains:

- **Red blood cells** that transport oxygen.
- **White blood cells** that protect against disease.
- **Blood platelets** that help the blood to clot and repair a cut.
- **Plasma** that is a liquid that carries these cells. It also transports important nutrients.

Did you know?

- the heart beats about 100,000 times per day (about 3 billion beats in a lifetime)
- a human heart is roughly the size of a large fist
- an adult heart beats about 60 to 80 times per minute
- the heart pumps approximately 6 litres of blood throughout the body

Staying Healthy

Balanced diet: fatty foods can clog blood vessels preventing blood from delivering what is needed and can cause a heart attack.
Exercise regularly: to keep your heart, lungs and muscles strong and healthy. Cardiovascular exercises are designed to improve the fitness of the overall circulatory system by strengthening the organs and pulse rate.
Plenty of sleep: to make sure your body has time to recover and recharge.

Most **drugs** are used to help someone get better if they are ill, and we call them **medicines**.

Medicines and drugs can be harmful. You should always check with a doctor or an adult you trust before taking them.

Cigarettes contain huge amounts of **chemicals** which can cause **lung damage** and **lung cancer**. They can also become addictive.