



Circulatory System

KNOWLEDGE ORGANISER

ESSENTIAL HUMAN BODY VOCABULARY

Circulatory system	A system which includes the heart, veins, arteries and blood transporting substances around the body.
Blood vessels	The tube-like structures that carry blood through the tissues and organs.
Veins	Carry deoxygenated blood toward the heart.
Arteries	Carry oxygenated blood away from the heart.
Capillaries	The smallest blood vessels in the body and it is here that the exchange of water, nutrients, oxygen and carbon dioxide takes place.
Circulate	To move continuously through a system.
Drug	A substance containing natural or man-made chemicals that has an effect on your body when it enters your system.
Alcohol	A drug produced from grains, fruits or vegetables when they are put through a process called fermentation.
Stimulant	Increases activity of the central nervous system and body.
Depressant	Can help relax muscles and nerves.
digest	To break down food into substances that can be absorbed by the body
reproduce	To produce offspring through sexual or asexual reproduction.
blood	The red liquid that circulates in the arteries and veins of vertebrate animals.
heart	An organ that pumps blood around the circulatory system

Drugs

A drug is a chemical that has an effect on the body.

Some drugs are prescribed by doctors to make people healthy. Other, illegal drugs can have a dangerous effect on our health.

Alcohol is a depressant. Alcohol can cause damage to the liver and brain. Cigarettes contain nicotine, which is a stimulant, and is addictive. They can cause damage to the lungs and heart.



Parts of Blood

Plasma	The only liquid part of blood. It carries nutrients round the body.
Platelets	The help to stop bleeding when the body is cut.
Red blood cells	These carry oxygen around the body.
White blood cells	These fight infection when the body is sick.

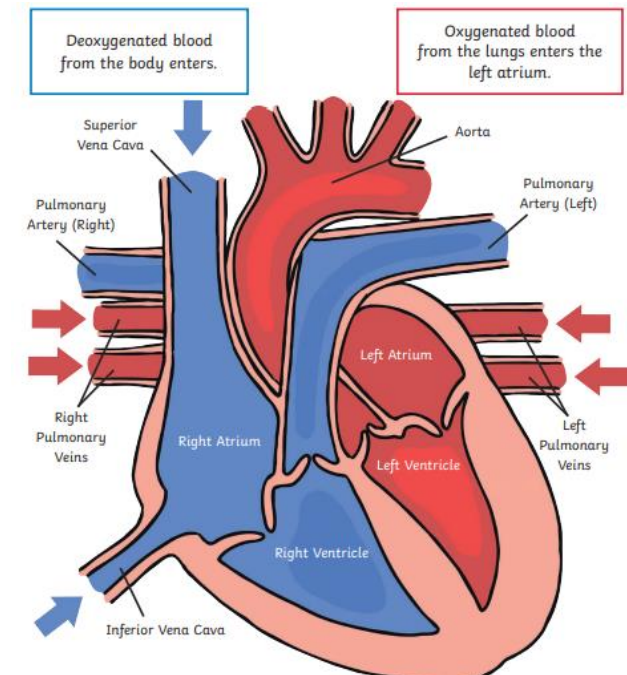
The heart

The circulatory system is centred on the heart, an organ that works constantly to pump blood around the body.

The heart is made up of four sections, called chambers. There are two sides to the heart (right and left) each of which have an atrium (at the top) and a ventricle (at the bottom).

The left atrium receives blood from the lungs and the right atrium receives it from the rest of the body.

The left ventricle pushes blood to the lungs and the right atrium pushes blood to the rest of the body.



MAKING LINKS TO PREVIOUS LEARNING GOLDEN VOCABULARY

Digestive System	The human body digests food to absorb the nutrients.
Life Cycle	Living things reproduce in different ways.
Animals including humans	The heart pumps blood around human bodies.
Animals including humans	The heart is a vital organ that keeps humans alive by pumping blood.

Regular exercise

- strengthens muscles including the heart muscle;
- improves circulation;
- increases the amount of oxygen around the body;
- releases brain chemicals which help you feel calm and relaxed;
- helps you sleep more easily;
- strengthens bones.

It can even help to stop us from getting ill.