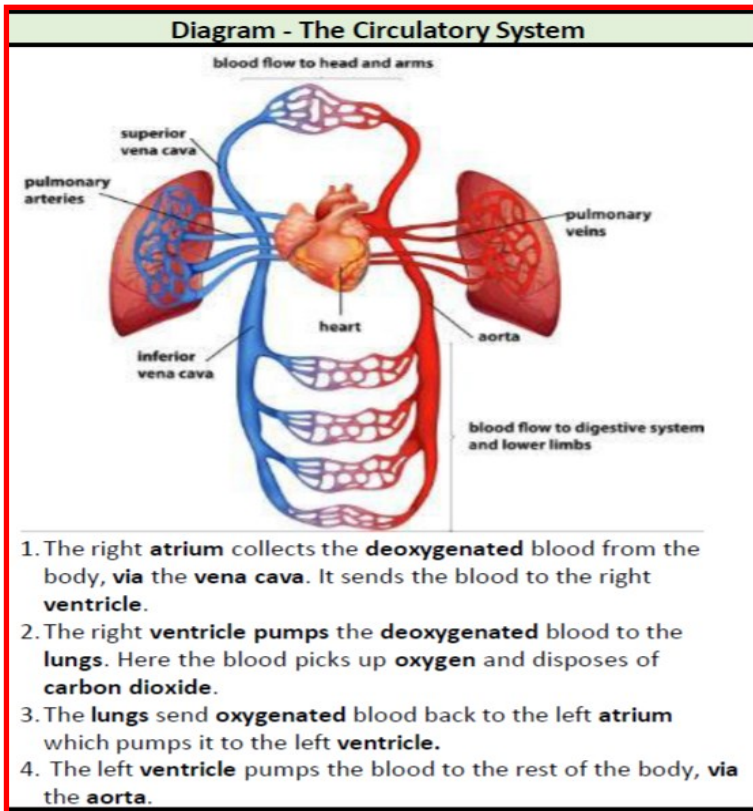
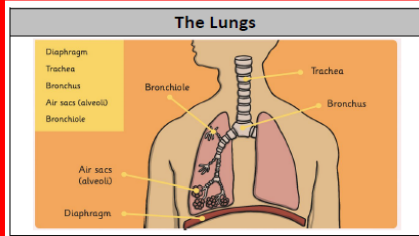
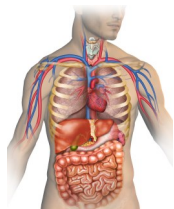


Class 4 - Knowledge Organiser

Autumn 1— My Brilliant Body

The Body Engine



Plasma is liquid. The other parts of your blood are solid.

Red blood cells carry oxygen through your body.

Platelets help you stop bleeding when you get hurt.

White blood cells fight infection when you're sick.

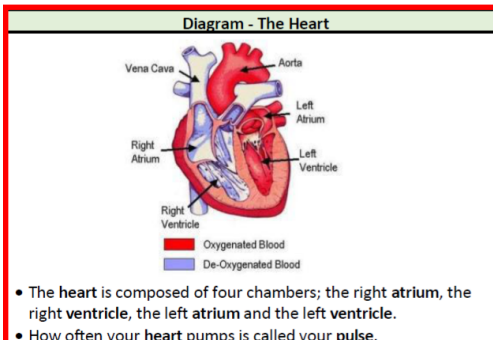
Regular exercise:

- 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.

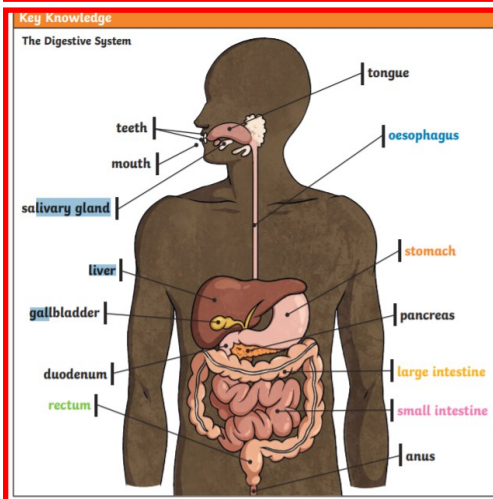
It can even help to stop us from getting ill.

Drugs, alcohol and smoking have negative effects on the body.

A healthy diet involves eating the right types of **nutrients** in the right amounts.



The Function of the Heart:	
1	Deoxygenated blood flows into the heart from the body through the veins
2	This blood is pumped out to the lungs through the pulmonary artery
3	Blood is then oxygenated in the lungs
4	Blood returns to the heart through the pulmonary vein
5	The oxygenated blood is then pumped out of the heart through the aorta
6	The blood travels around the body delivering oxygen and nutrients to the organs.



Useful words to learn

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
atrium	One of the chambers in the heart
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
Circulatory system	The system responsible for circulating blood through the body, that supplies nutrients and oxygen to the body and removes waste products such as carbon dioxide.
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 carries oxygen.
pulse	The regular beating of blood through your body. How fast or slow your pulse is depends on the activity you are doing.
Veins	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
ventricle	One of the chambers of the heart

Class 4 - Autumn Term 1— The Body engine

KWL

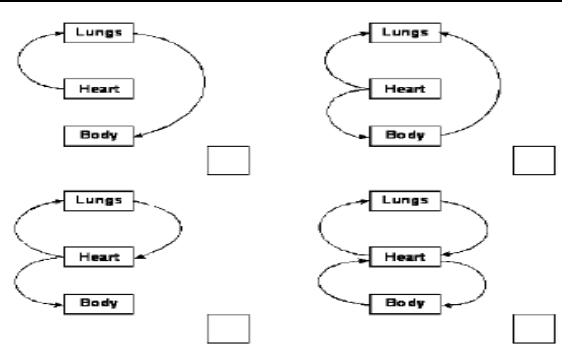
The heart, blood vessels and lungs make up the...	Start	End
Digestive system		
Circulatory system		
Skeletal system		
Muscular system		

Which one of these is not an organ?	Start	End
Heart		
Lungs		
Blood		

Arteries, veins and capillaries are all examples of...	Start	End
Blood		
Blood vessels		
Blood types		
Nutrients		

The function of the blood is to provide the body with...(tick three)	Start	End
Nutrients		
Water		
Carbon dioxide		
oxygen		

The veins carry _____ blood.	Start	End
deoxygenated		
Oxygenated		
blue		

Which diagram best shows the path of the blood as it circulates?	Start	End
		

You are investigating which investigating which exercise yields the highest heart rate. How can you ensure a fair test? Tick two.	Start	End
Treat everyone the same		
Measure the same subjects pulse before, during and after each exercise		
Ensure the starting heart rate is the same before each exercise		
Complete each exercise without resting between them		

Tick TWO boxes below to show the two activities that would increase pulse rate the most.	Start	End
Reading a book.		
Playing football.		
Drinking water.		
Going for a walk.		

Questions I have at the start:

Answered?

YES NO