

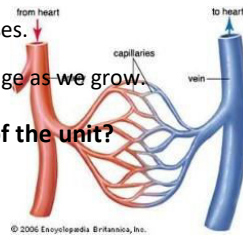
What should I already know?

- Which things are living and which are not.
- Classification of animals (e.g. amphibians, reptiles, birds, fish, mammals, invertebrates)
- Animals that are carnivores, herbivores and omnivores.
- Animals have offspring which grow into adults.
- The basic needs of animals for survival (water, food, air)
- 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.

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
circulatory system	the system responsible for circulating blood through the body, that supplies nutrients and oxygen to the body and removes waste
deoxygenated heart	products such as carbon dioxide . blood that does not contain oxygen
lungs	the organ in your chest that pumps the blood around your body
nutrients	two organs inside your chest which fill with air when you breathe in. They oxygenate the blood and remove carbon dioxide from it.
organ	substances that help plants and animals to grow
oxygen	a part of your body that has a particular purpose
oxygenated	a colourless gas that plants and animals need to survive
pulse	blood that contains oxygen
	the regular beating of blood through your body. How fast or slow your pulse is depends on the activity you are d

- 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.



What will I know by the end of the unit?

- What is the circulatory system?
- The **circulatory system** is made of the **heart, lungs** and the **blood vessels**.
 - **Arteries** carry **oxygenated** blood from the **heart** to the rest of the body.
 - **Veins** carry **deoxygenated** blood from the body to the **heart**.
 - **Nutrients, oxygen** and **carbon dioxide** are exchanged **via** the **capillaries**.
- Choices that can harm the circulatory system
- Some choices, such as smoking and drinking alcohol can be harmful to our health.
 - 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
 - Alcohol can cause short-term effects such as addiction and loss of control and long-term effects such as **organ** damage, cancer and death

Why is exercise so important?

Exercise can:

- tone our muscles and reduce fat
- increase fitness
- make you feel physically and mentally healthier
- strengthens the **heart**
- improves **lung** function
- improves skin

Diagram - The Circulatory System

1. **Deoxygenated** blood is sent to the **heart** from the rest of the body.
2. This is then sent from the **heart** to

respiration
exhaling air

vein

vena cava

via

process of respiring; breathing; inhaling and exhaling air

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

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

Investigate!

- How does your **pulse** change with exercise?

2 3 the **lungs**. Here, the blood picks up

- 1 blood back to the rest of the body.
- 2
3. **oxygen** and disposes of **carbon dioxide**.
4. **Oxygenated** blood is then sent back to the heart.
4. The **heart** sends the **oxygenated**

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

Question 1: The heart, blood vessels and lungs make up the...	Start of unit:	End of unit:
digestive system		
circulatory system		
skeletal system		
muscular system		

Question 2: Which one of these is not an organ?	Start of unit:	End of unit:
heart		
lungs		
blood		

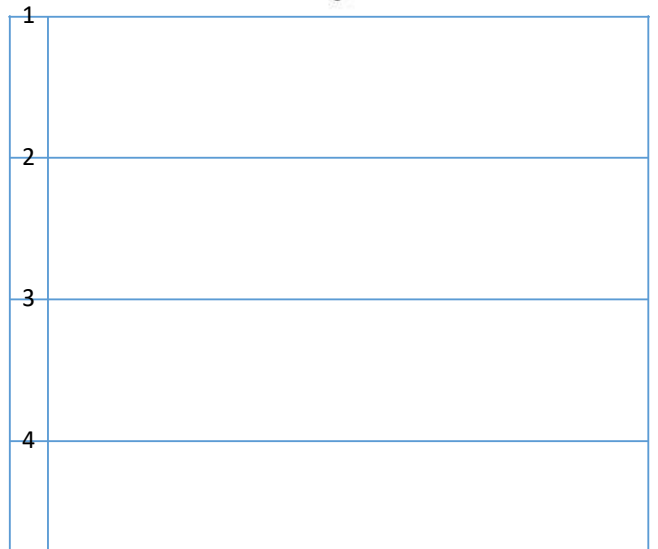
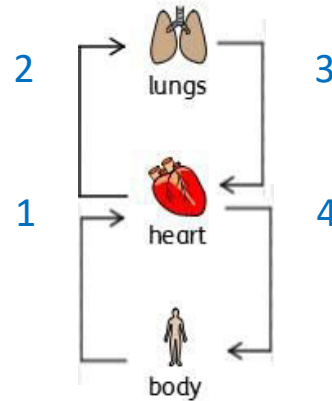
Question 3: The most effective way to show the change in pulse rate over time is by using a...	Start of unit:	End of unit:
picture		
bar chart		
pie chart		
line graph		

Question 4: You are investigating which exercise yields the highest heart rate. How can you ensure a fair test? Tick two.	Start of unit:	End of unit:
treat everybody the same		
measure the same subject's pulse before, during and after each exercise.		
ensure the starting heart rate is the same before each exercise		
complete each exercise without resting in between.		

Question 5: The veins carry _____ blood.	Start of unit:	End of unit:
deoxygenated		
oxygenated		
blue		

Question 6: Tick TWO boxes below to show the two activities that would increase pulse rate the most.	Start of unit:	End of unit:
reading a book		
playing football		
drinking water		
going for a walk		

Question 7: Explain what is happening at each stage of the process.



Question 8: Which of these can harm our bodies? Tick two.

smoking	Start of unit:	End of unit:
all drugs		
alcohol		
exercise		

Question 9: The function of the blood is to provide the body with...(tick three)

nutrients	Start of unit:	End of unit:
water		
carbon dioxide		
oxygen		

Question 10: Arteries, veins and capillaries are examples of...

blood	Start of unit:	End of unit:
blood vessels		
blood types		
nutrients		