

What should I already know?

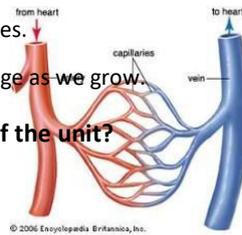
- Which things are living and which are not.
- Classification of animals (e.g. amphibians, reptiles, birds, fish, mammals, invertebrates)
- Animals that are carnivores, herbivores and omnivores.
- Animals have offspring which grow into adults.
- The basic needs of animals for survival (water, food, air)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

- 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.

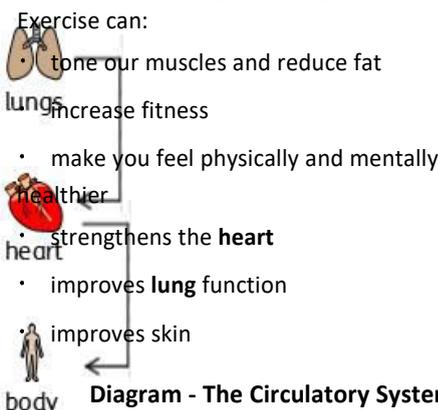
- **Veins** carry **deoxygenated** blood from the body to the **heart**.

- **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?



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

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 | | |

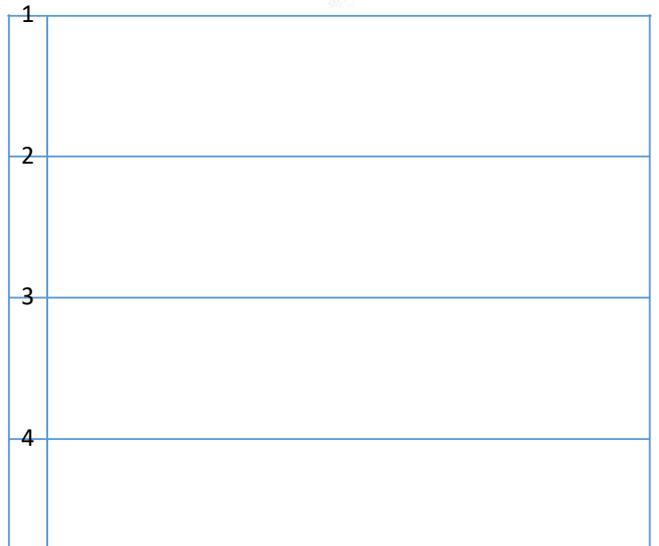
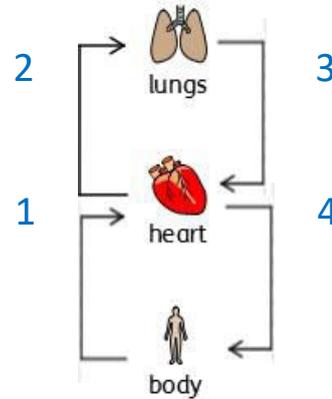
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|--|----------------|--------------|
| Question 3: The most effective way to show the change in pulse rate over time is by using a... | Start of unit: | End of unit: |
| picture | | |
| bar chart | | |
| pie chart | | |
| line graph | | |

| | | |
|---|----------------|--------------|
| 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 | | |
| | | |
| | | |