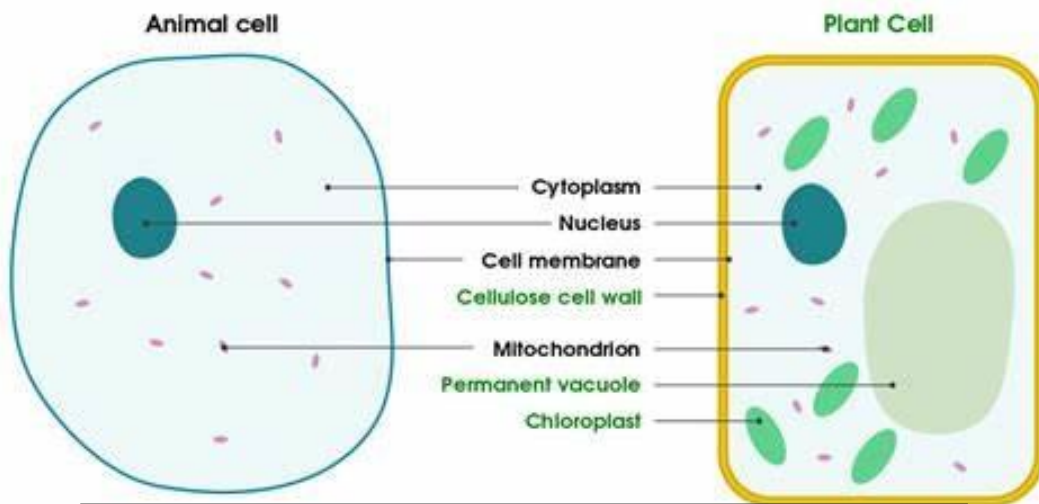




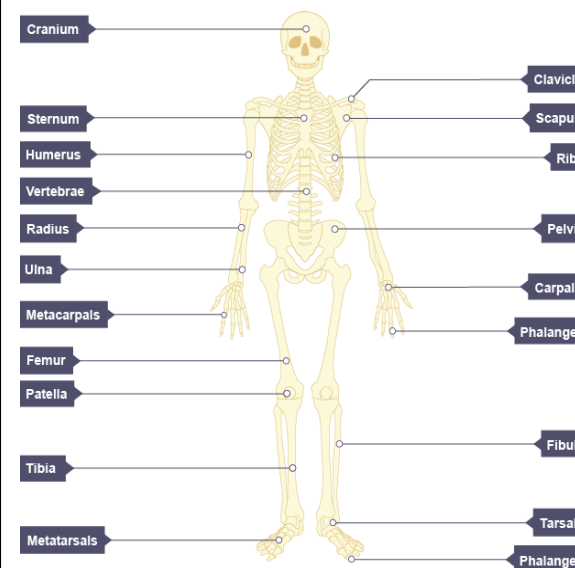
Your teacher will tell you which topic you should revise. Read and learn all the information in the topic, ready for a Quiz in lesson

Topic 1: Movement and cells



Key Terms	Definition
Cell wall	Made of cellulose, which supports the cell
Cell membrane	Controls movement of substances into and out of the cell
Cytoplasm	Jelly-like substance, where chemical reactions happen
Nucleus	Contains genetic information and controls what happens inside the cell
Vacuole	Contains a liquid called cell sap, which keeps the cell firm
Mitochondria	Where most respiration reactions happen
Chloroplast	Where photosynthesis happens

Movement – the skeleton



The Human Skeleton provides:

Support –keeps the body upright

Posture –gives the correct shape to our body.

Protection – the bones of the skeleton protect the internal organs and reduce the risk of injury on impact.

Movement – the skeleton allows movement of the body as a whole and its individual parts.

Production of blood cells – certain bones in the skeleton contains bone marrow which produces red blood cells, white blood cells and platelets.

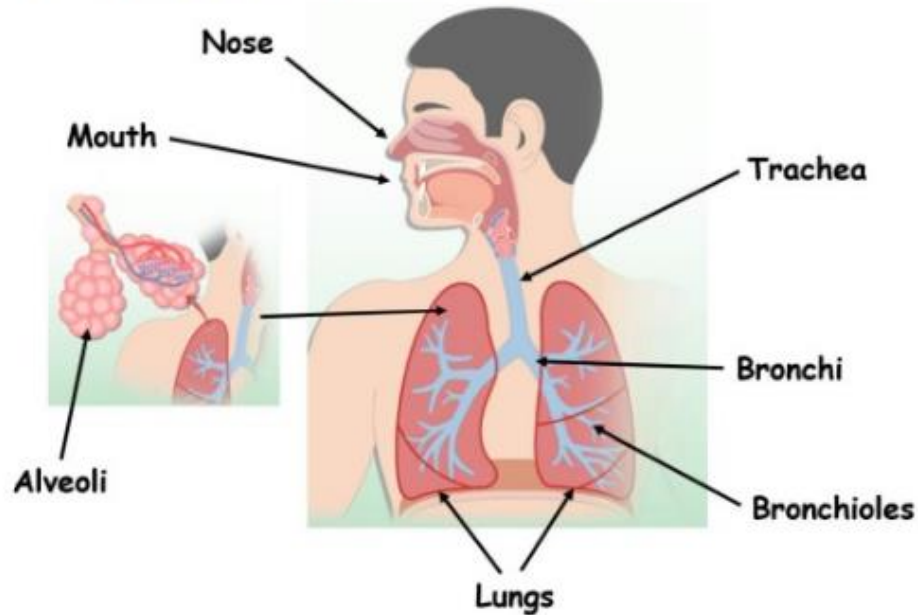
Storage of minerals - the bones store minerals such as calcium and iron.



Your teacher will tell you which topic you should revise. Read and learn all the information in the topic, ready for a Quiz in lesson.

Topic 2: The Respiratory system

Main structures of the respiratory system:



Inspiration (Breathing in) and Expiration (breathing out)



Inspiration

The diaphragm and the intercostal muscles contract. The intercostal muscles raise the ribs upwards and outwards. This increases the volume of the chest cavity and causes air to rush into the lungs



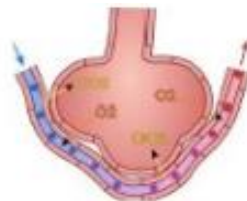
Expiration

The diaphragm and the intercostal muscles relax, this lowers the ribs downwards and inwards. This decreases the volume of the chest cavity and causes the air to be forced out the lungs

Alveoli as the site of gas exchange:

Gas exchange happens between

- Alveoli and the capillaries
- Capillaries and the muscle tissue

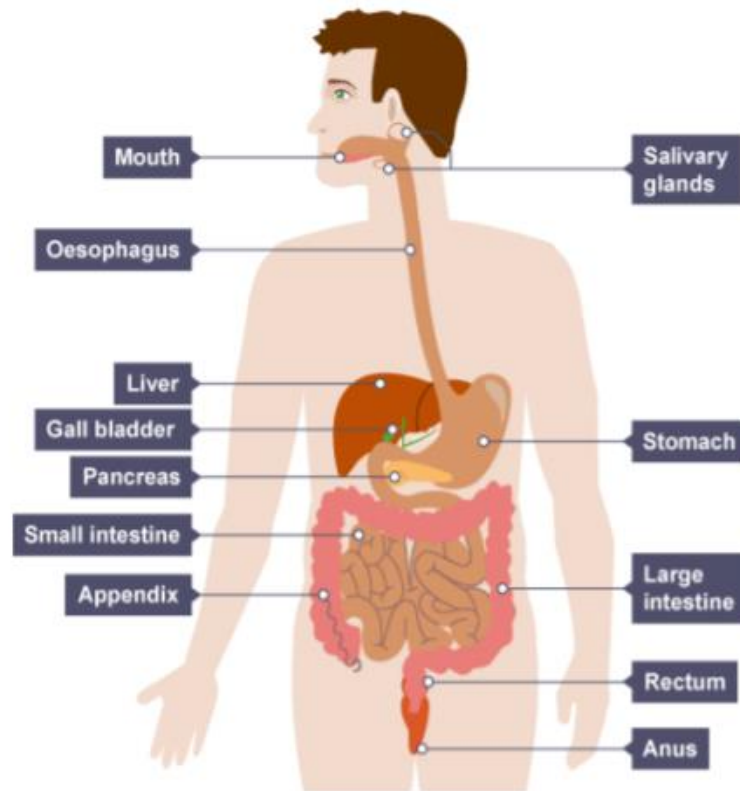




Your teacher will tell you which topic you should revise. Read and learn all the information in the topic, ready for a Quiz in lesson.

Topic 3: The Digestive System

Organs of the digestive system



The food we eat has to be broken down into other substances that our bodies can use. This is called **digestion**. Without digestion, we could not absorb food into our bodies and use it. Digestion happens in the **digestive system**, which begins at the mouth and ends at the anus. After we swallow, our food passes through these organs in turn: **oesophagus** or gullet - **stomach** - **small intestine** - **large intestine**. **Liver and pancreas:** The liver and the pancreas play an important part in digestion. The liver produces **bile**, which helps the digestion of lipids (fats and oil). The pancreas produces biological catalysts called digestive **enzymes** which speed up the digestive reactions. **Digestion and enzymes:** Our **teeth** break food down into small pieces when we chew. This is only a start to the process of digestion, as chewed pieces of food are still too large to be absorbed by the body. Food has to be broken down chemically into really small particles before it can be absorbed. Enzymes are the biological catalysts needed to make this happen quickly enough to be useful.



Science
Support and application

Year 8
Term 3

Vocabulary

Wider Research

Apply

1. Multicellular organism
2. Cell
3. Tissue
4. Organ
5. Organ System
6. Bone
7. Skeleton
8. Support
9. Protect
10. Joint
11. Cartilage
12. Ligament
13. Tendon
14. Lungs
15. Inspiration
16. Expiration
17. Digestion
18. Enzyme

Cells

<https://www.bbc.co.uk/bitesize/guides/z9hyvcw/revision/3>

Skeleton

<https://www.bbc.co.uk/bitesize/guides/zpkq7ty/revision/1>

Respiratory system

<https://www.bbc.co.uk/bitesize/guides/zq349j6/revision/2>

Digestive system

<https://www.bbc.co.uk/bitesize/guides/z9pv34j/revision/1>

Enzymes

<https://www.bbc.co.uk/bitesize/guides/z9pv34j/revision/2>

1. Name the three cell parts only found in plant cells
2. What is the function of the nucleus
3. Which bones help to protect the lungs
4. What are the 6 functions of the skeleton
5. What do we call the structures at the ends of our lungs
6. How do the rib cage and diaphragm move when we breathe in
7. How does the rib cage and diaphragm move when we breathe out
8. How does saliva help with digestion
9. What is the role of each of the organs in the digestive system
10. How do enzymes help digest our food