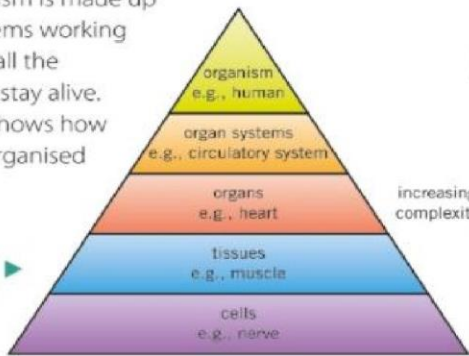


Section 1: levels of organisation

Cell Structure	Function
1 Cell	Building block of life
2 Tissue	Group of cells of the same type
3 Organ	Group of different tissues working together
4 Organ System	Group of organs working together

The fifth level of organisation is a multicellular organism. A multicellular organism is made up of several organ systems working together to perform all the processes needed to stay alive. The diagram below shows how the human body is organised into different levels.

This is the hierarchy of organisation in the human body.

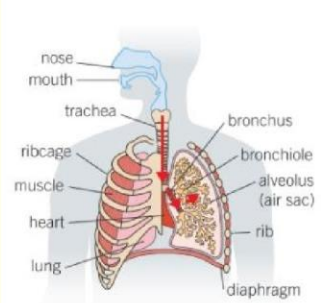


Section 2: Gas exchange and breathing

Specialised Cell	How structure relates to function
8 Inhale	Breathing in, filling the lungs with air – taking in oxygen
9 Exhale	Breathing out – removing carbon dioxide
10 Ventilation	Breathing in and out
11 Respiration	A chemical reaction where sugar and oxygen are converted into energy , water and carbon dioxide
12 Diaphragm	A sheet of muscle used in breathing: contraction draws air in

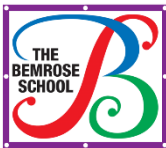


10. Ventilation (breathing)



22. Respiratory System

Air enters your body through your mouth and nose.
↓
Air moves down the **trachea** (windpipe) – a large tube.
↓
Air moves down a bronchus – a smaller tube.
↓
Air moves through a bronchiole – a tiny tube.
↓
Air moves into an **alveolus** – an air sac.
↓
Oxygen then diffuses into the blood.



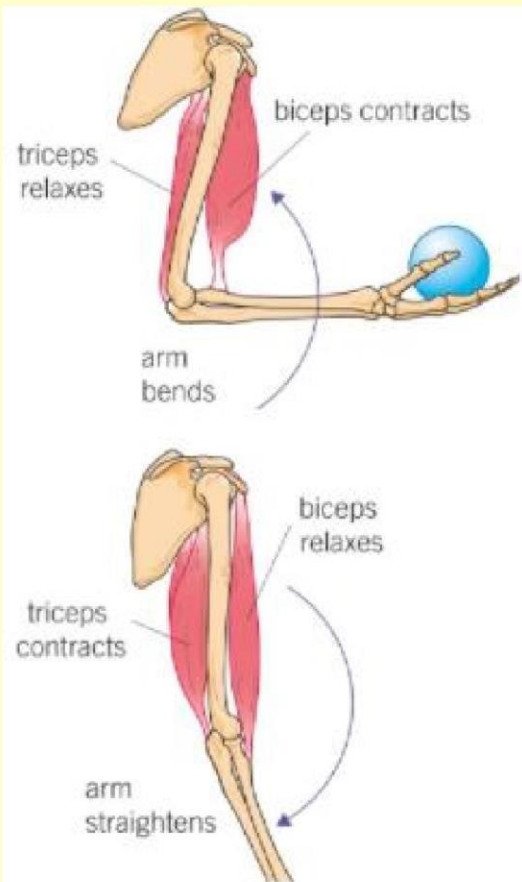
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Section 3: Respiratory system

10 Trachea	Large tube that air moves down into the lungs (Windpipe)
11 Bronchus	Smaller tubes that branch into the Lungs
12 Alveolus	Structure found in the lungs where gas exchange takes place
20 Lungs	The organ where gas exchange takes place
21 Lung volume	The amount of air lungs can hold.
22 Respiratory system	Organs involved in gas exchange

11. Human Skeleton



22. Muscle antagonism

Section 4: Movement

10 Bones	Tissue that forms a hard structure used to protect organs and for movement
11 Skeleton	All the bones in the skeleton
12 Cartilage	The strong smooth tissue that covers the end of bones to prevent them rubbing together
20 Ligaments	Tissue that joins two bones together
21 Tendons	A tissue that joins a muscle to a bone
22 Antagonistic Muscle	A pair of muscles that work together to control movement at a joint – as one muscle contracts the other relaxes