

	<b>7C Muscles and Bones</b>
---	-----------------------------

1. Muscles and Breathing	
<b>Breathing</b>	The movement of muscles that allows us to take in and excrete gases.
<b>Respiration</b>	Process by which oxygen is used to release energy- produces carbon dioxide.
<b>Gas Exchange</b>	One gas is exchanged for another- oxygen goes into the blood, carbon dioxide leaves the blood.
<b>Gas Exchange System</b>	The organs that help with breathing / gas exchange- lungs, trachea, diaphragm
<b>Inhale</b>	Breathing in
<b>Exhale</b>	Breathing out
<b>Ventilation</b>	The movement of air into and out of the lungs
<b>Breathing Rate</b>	Number of times you inhale and exhale in one minute.

## 2. Muscles and Blood

<b>Pulse</b>	The feeling of the heart beating that can be felt.
<b>Pulse Rate</b>	The number of pulse beats you feel in a minute.
<b>Blood Vessels</b>	A tube that carries blood around the body.
<b>Arteries</b>	Carry blood away from the heart to capillaries.
<b>Capillaries</b>	Tiny blood vessels connecting arteries & veins.
<b>Veins</b>	Carry blood from capillaries towards heart.
<b>Plasma</b>	Main part of blood- the liquid part.
<b>Red Blood Cells</b>	Carry oxygen in the blood- haemoglobin in cells carries the oxygen.
<b>Red Blood Cell Adaptations</b>	No nucleus (more room for haemoglobin). Curved shape increases surface area to take in oxygen quickly.
<b>White Blood Cells</b>	Fight infections and keep us healthy.
<b>Bone Marrow</b>	Where red and white blood cells are made.

3. The Skeleton	
<b>Skeleton</b>	Formed by the bones in the body- allows for support, protection and movement.
<b>Backbone</b>	Made up of smaller vertebrae- the bodies main support.
<b>Skull</b>	Made up of 22 bones- protects the brain.
<b>Tendons</b>	Connects muscle to bones.
<b>Ligaments</b>	Connects bones together.
<b>Cartilage</b>	Slippery tissue on the ends of bones.
<b>Flexible Joint</b>	Two or more bones meeting that can be moved.

4. Muscles and Moving	
<b>Locomotor System</b>	The system that allows you to move parts of the body- muscles and bones.
<b>Movement</b>	Muscles contract and pulls on bone it is attached to.
<b>Antagonistic Pairs</b>	Pairs of muscles that allow bones to move in two different directions.
<b>Impulses</b>	Messages sent from brain that tell muscles to contract.

5. Drugs	
<b>Drug</b>	Substances which changes the way the body works.
<b>Medicine</b>	Drugs used to help people with illness/injury.
<b>Side-Effects</b>	Harmful / unpleasant effects of using drugs.
<b>Addictive</b>	Feeling of not being able to cope without the drug.
<b>Cannabis</b>	Can cause memory loss and mental illness.
<b>Ecstasy</b>	Can cause mental illness, kidney damage and death.
<b>Cocaine</b>	Addictive and blocks arteries.
<b>Heroin</b>	Addictive, collapses veins, causes vomiting & headaches
<b>Stimulants</b>	Decrease your reaction time- impulse carried faster. e.g. caffeine
<b>Depressants</b>	Increase your reaction time- impulses carried slower. e.g. alcohol