Sycamore Class Knowledge Organiser Autumn 1: Migration and movement.

Vocabulary Dozen

Blood Vessel: a tubular structure carrying blood through the tissues and organs; a vein, artery, or capillary.

Vein: any of the tubes forming part of the blood circulation system of the body, carrying in most cases oxygen-depleted blood towards the heart.

Capillary: the smallest of all blood vessels which form the connection between veins and arteries.

Artery: a blood vessel that carries blood away from the heart to other parts of the body.

Respiration: the action of breathing

Oxygenated: supplied, treated, or enriched with oxygen.

Deoxygenated: remove oxygen

Haemoglobin: responsible for transporting oxygen in the blood

Earthquake: a sudden violent shaking of the ground, typically causing great destruction, as a result of movements within the earth's crust or volcanic action.

Tectonic plates: Broken pieces made of the Earth's crust.

Biome: A large region with a certain climate and certain types of living things.

Natural disaster: a natural event such as a flood, earthquake, or hurricane that causes great damage or loss of life To link to our class newsletter, below is some information on our key topics this half term with key vocabulary we will be learning that you can use as a tool at home for revision and discussion.

The circulatory system.

Key Facts

The heart has a double pump to enable oxygenated and deoxygenated blood to be pumped separately.

The vena cava, pulmonary artery, pulmonary vein and aorta are the main vessels of the heart.

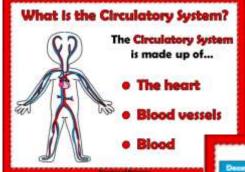
Arteries have a thick wall because they carry oxygenated blood at high pressure.

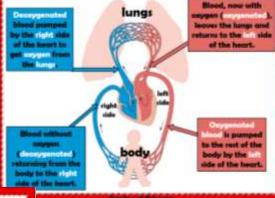
The alveoli are tiny air sacs in the lungs which allow for rapid gaseous exchange because they have a large surface area, are one cell thick and have a good blood supply.

Veins carry deoxygenated blood at low pressure. They have a large lumen, for less resistance on the blood and have valves to prevent backflow.

Red blood cells have haemoglobin, which helps them carry oxygen. They are also biconcave disc shape, to increase their surface area and they have no nucleus to increase their oxygen carrying capacity.

White blood cells help fight disease and infection.





Blood

The human body contains up to 5 litres of blood. It is made up of 3 types of blood cells floating in a liquid called plasma...



- Red blood cells
- Platelets
- White blood cells

The Heart

- The heart is a muscle located in the centre of the chest slightly towards the left
- It is roughly the size of your fist
- Its function is to pump blood around the body through blood vessels



In Geography, we will be looking at the reasons people migrate including human and natural disasters, understanding where these

occur and why and their impact on the area and its inhabitants.



Push factors are the factors that force migrants to leave their own country. Pull factors pull migrants towards their new country.

Natural Disasters

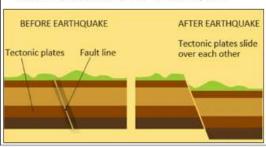
-Natural disasters are the consequence of the natural processes of Earth.
-Natural disasters may cause loss of life, property damage, and economical/social problems.
- Human activity is likely to be at least partially responsible for some 'natural' disasters.

Earthquakes		-Earthquakes happen when two large pieces of the Earth's crust (tectonic plates) slip suddenly. -This causes shock waves to the surface of the Earth. -When earthquakes take place underneath or near water, they may trigger tsunamis — (huge waves) Both can cause huge human & environmental damage.
Volcanic Eruptions		-Volcanic eruptions occur when lava, rock fragments, hot vapour and gas are released through a volcano from beneath the Earth's surfaceDuring eruptions, damage and death is caused by lava flows, mudslides and avalanches.
Hurricanes/ Tornadoes	MAS	-Hurricanes and tornadoes are both examples of adverse weather that involve extremely strong windsLarge hurricanes and tornadoes have the power to uproot trees, throw cars, and even dismantle buildingsThey also cause huge storms which can cause flooding.
Drought/ Flooding		-Droughts occur when places do not receive an adequate water supply, often as a result of decreased rainfallFlooding is an overflow of water that submerges land that is usually dry. In addition to destroying environments, flooding can also cause contamination and spread disease.

How do Earthquakes occur?

Earthquakes

- -The Earth's crust is made up of many moving sheets of rocks, called tectonic plates.
- -The places where these plates meet are called fault lines. As they rub past each other, pressure can cause the plates to suddenly slip.
- -This releases a large amount of energy, and creates seismic waves that travel through the Earth. The waves are felt most strongly in close proximity to where the event takes place — an earthquake.



Human-Caused Disasters

-Human caused disasters are the consequence of human or technological hazards.
 -Some are more immediate, whereas others occur over as a result of human activity over time.
 - Human activity is likely to be at least partially responsible for some 'natural' disasters.

Pollution	-Pallution occurs when something is added to the environment that is harmful to living thingsAir pollution can be caused by burning fossil fuels, whereas water pollution may some from sewage/ wastePollution causes diseases, global warming & acid rain.
Deforestation	Deforestation is the permanent removal of trees to make way for something besides forest e.g. housing, agriculture. Trees absorb carbon dioxide and provide homes for millions of animals — as forests are lost, biodiversity is harmed and carbon dioxide levels rise.
Industrial Accidents	 Industrial accidents are caused by industrial companies, as a result of negligence or incompetence. They may include all spills, fires, or nuclear explosions. These can have a wide range of catastrophic effects on the environment.
Nuclear Radiation	-Humans have the technology to trigger nuclear reactions, which can be useful, but also extremely harmfulRadiation can be deliberate (e.g. bombs) or accidental and can cause instant death, acute and long term linesses.

History:

We are going to be looking at migration through British History, focusing on the movement of people during and after WW2, including the evacuation of children and vulnerable adults to the countryside and who the Windrush generation were in supporting the rebuilding of Britain post war!

axis	Countries which fought on the German side including Italy, Germany and Japan.
Allies	Countries which fought on the British side (including: USA, Great Britain, France and Russia.
Nazi	Member of the German political group which came to power in 1933.
evacuation	Organised movement of children and the vulnerable from towns and cities to safe zones.
evacuee	Someone who was evacuated, moved from a danger area to a safer place.
Blitz	A series of bombing raids on the UK.
propaganda	Controlling news media (such as radio) to depict the war effort.
Holocaust	Murder of Jews and other groups of people by the Nazis.
Luftwaffe	The German Airforce.
RAF	The Royal Airforce (British).
refugees	A person who has been forced to leave their country in order to escape war.

Sticky knowledge:

World War 2 was a battle between two groups of countries -the 'Allies' and the 'Axis'. The major Allied powers were Britain, France, Russia, China and the United States. The major Axis powers were Germany, Italy and Japan

Adolf Hitler, together with the Nazi Party, wanted Germany to rule Europe. To gain more land and power, on 1 September 1939 German troops invaded Poland. After Hitler refused to stop the invasion, Britain and France declared war on Germany - World War II had begun.

Millions of Germans were imprisoned and killed because they didn't fit the image of the 'perfect' German. Hitler wanted to create what he thought was the 'best' and strongest race- and to the Nazi Party, this excluded certain groups, such as Jews and those with physical and mental disabilities.

The group most heavily targeted by the Nazis were the Jews. Around six million Jewish people were killed during World War 2 in one of history's most terrible events - the Holocaust.

During WW2, many children, pregnant women and other vulnerable people were moved from big cities like London to more remote countryside locations. It was considered that they would be safer there and have more protection from bombing raids by opposition forces. This was known as evacuation.

After World War Two, thousands of people moved to the UK from the Caribbean - and they were known as the Windrush generation. The Windrush Generation came to Britain to help the country rebuild after the second world war and who have made a tremendous contribution to the culture around us.

