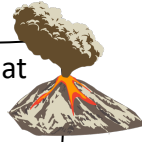


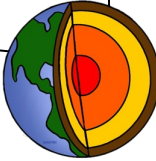
YEAR 8 GEOGRAPHY CRUCIAL KNOWLEDGE

Natural Hazards

Natural Hazards are natural events that pose a risk to people. For example, earthquakes and volcanic eruptions.



The Earth's structure consists of the crust, mantle, outer core and inner core. The crust is broken up into pieces called tectonic plates that move due to convection currents, ridge push and slab pull.



There are 4 plate boundaries: constructive, conservative, destructive (oceanic-continental) and destructive (continental-continental).

An earthquake is a sudden, violent shaking of the ground caused by the sudden release of energy in the Earth's crust that creates seismic waves (P and S waves).

Nepal experienced an earthquake in 2015 due to the collision of the Indian and Eurasian plates. This caused 8632 deaths and thousands of homes destroyed.

These are measured by the Richter Scale, the Moment Magnitude Scale and the Mercalli Scale.



The Eyjafjallajokull volcano in Iceland erupted in 2010, this caused thousands of flights to be cancelled due to the ash cloud which cost airlines £200 million per day.



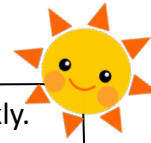
People live in hazardous areas due to poverty, fertile soil, geothermal energy, tourism, resources, friends and family, employment or/and ignorance.

We can predict eruptions using seismometers and thermal imaging, earthquakes are more difficult to predict. We prepare for eruptions by creating exclusion zones and evacuating people, whereas we prepare for earthquakes by building earthquake-proof buildings.



Weather and Climate

Weather is the short-term atmospheric conditions and can change quickly. Climate is the long-term average conditions.



The world is split into different climate zones called biomes, these are polar, temperate, Mediterranean, arid and tropical, each with different characteristics.



We measure weather through a variety of different qualitative and quantitative methods, using both opinion and scientific equipment.



The climate of the UK is impacted by 4 air masses. The climate has differences in temperature and precipitation across the UK.

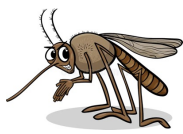
Extreme weather is when a weather event is significantly different from the average or usual weather pattern. For example, flooding, heatwaves, thunderstorms and heavy snow.

There are two different types of pressure that determine weather. Low pressure (depressions) brings rain and unsettled conditions; High pressure (anticyclones) brings calm and settled conditions.

There are 5 main factors that affect climate: latitude, altitude, distance from the sea, ocean currents and prevailing winds.



YEAR 8 GEOGRAPHY CRUCIAL KNOWLEDGE

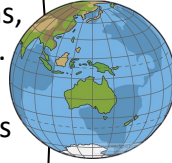


Climate Change

Climate change describes a change in the average conditions in a region over a long period of time. The greenhouse effect is a process that occurs when gases in Earth's atmosphere trap the Sun's heat.



Natural causes of climate change include Milankovitch Cycles (Eccentricity, Obliquity and Precession), major volcanic eruptions, sunspots and oceanic global circulation. Human causes involve the release of greenhouse gases from activities such as farming, driving and sewage treatment.



Impacts of climate change include drought, flooding, sea level rise, extinction, unsafe drinking water and disease.

Adaptation is where we make changes to accommodate the changes as they take place - reducing the effects of climate change. Mitigation is where we try to stop the change from happening.

The Almighty Dollar

A country's economy is the wealth that it gets from business and industry. A Transnational Corporation (TNC) is a company that operates in more than one country.



There are 4 sectors of the economy that you can work in: primary, secondary, tertiary and quaternary.

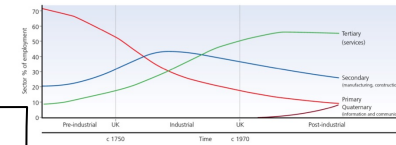
The cycle of poverty is caused by self-reinforcing mechanisms that cause poverty to persist for at least three generations.

China is the largest investor in Africa. Advantages include new infrastructure and increasing tourism. Disadvantages include continued unemployment for locals and Chinese workers sending their money home as remittances.



Nigeria experiences food insecurity due to continued conflict, climate change, inflation, and rising food prices.

India's infrastructure poses challenges that hinder its development.



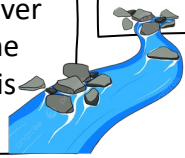
The Clark Fisher Model shows how the importance of different sectors is different in countries at different levels of development, over time and over space.

India has a tax problem due to informal employment and low pay. Informal employment is where workers do not have fixed hours or pay, these are often unskilled and labour intensive, these workers will not be protected and pay no tax.

YEAR 8 GEOGRAPHY CRUCIAL KNOWLEDGE

Rivers

A river is a natural stream of water that flows in a channel with defined banks over the land into the sea. They begin at the source and where they meet the sea is called the mouth.



The course of a river is split into 3 sections: upper, middle, and lower. A long profile of a river shows this course from the source to the mouth.

There are four types of erosion: hydraulic action, attrition, abrasion, and solution.

The three main processes within a river system are erosion (rocks being worn away), transportation (sediment being moved down the river) and deposition (sediment being dropped - no longer transported).

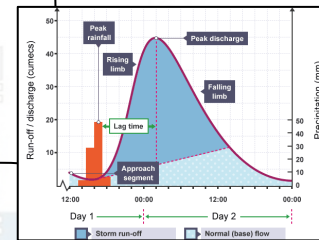
There are four types of transportation: traction, saltation, suspension, and solution

A meander is a bend in the river, these form due to the processes of erosion and deposition.



Flooding occurs when a river bursts its banks and overflows onto the surrounding land. The risk of a flood is increased by factors such as geology, relief, and precipitation. They can be shown on a hydrograph.

Waterfalls form where the water runs over bands of hard and soft rock, eroding the soft rock quicker - creating a step. This process continues until a waterfall has formed.



Hard engineering management involves using artificial structures, whereas soft engineering management is a more sustainable and natural approach to manage coastal erosion.



Urbanisation

A megacity is an urban area with a population of at least ten million people.

Dharavi is being redeveloped by rehoming residents of the slums of Dharavi into flats. Some residents do not like the idea of this as it may ruin the community and small businesses.



MUMBAI

Migration is the movement of people from one area to another. Some migrations are forced (war), voluntary (work), permanent and temporary, international, and regional.



Pollution in megacities can harm human health, cause regional haze, damage crops, influence air quality in regions further away, and contribute to climate change.



Issues in megacities revolve around housing, traffic infrastructure, water and sanitation supplies, electricity, employment, and equality.



Cities can be made sustainable, by meeting the social, economic, and environmental needs of the current population without compromising the needs of future generations.

