Oakfield Geography Department

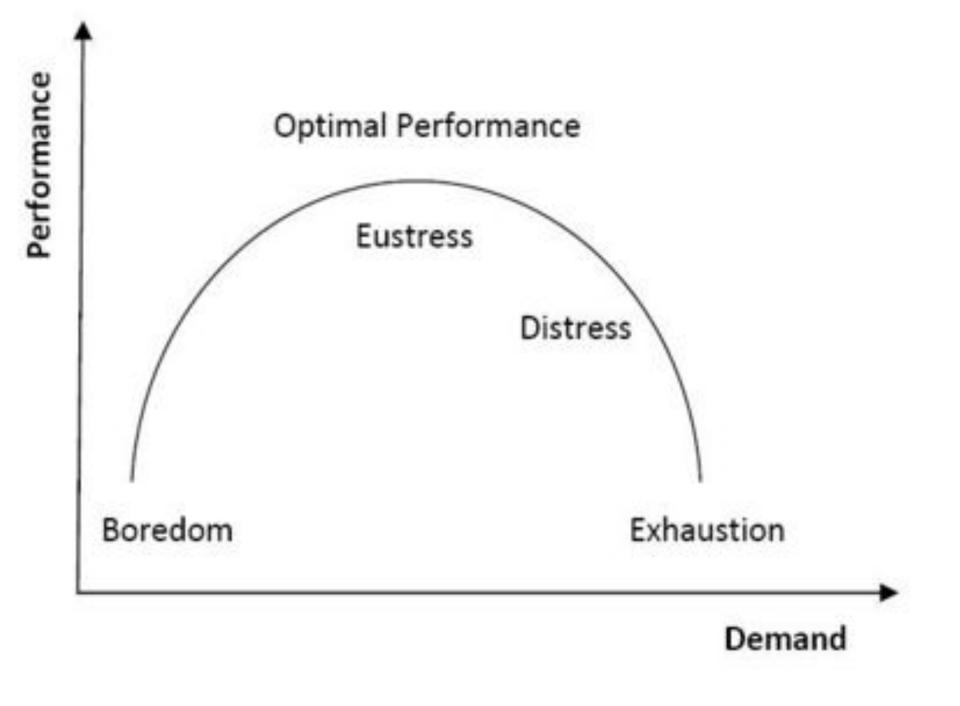


LO: To learn how to successfully destroy and conquer your exams!

What is 'stress'?

Stress is anything that places a demand on us physically, mentally, or emotionally. It makes us change the normal way we live.

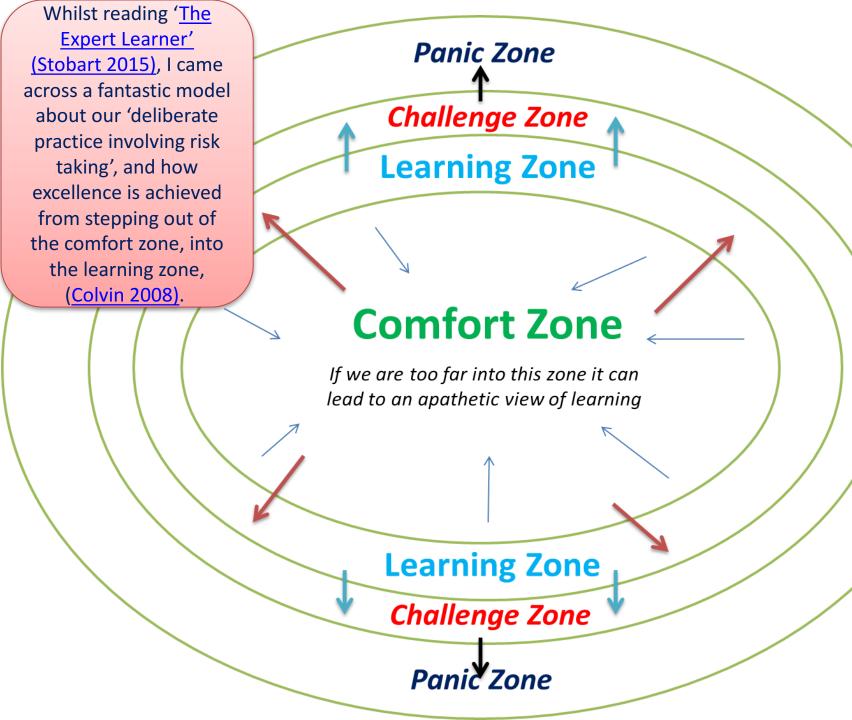
Most of us think of stress as a crisis, but not all stress is bad.



However the word 'stress' is not applicable here

WE believe it is more about challenge, about being taken out of your comfort zone to recognise you can achieve no matter what your starting point is

That is the purpose of Summative testing (fancy term for exams!!)



Exam Format 90 mins= 10 mins reading time 10 mins reflecting time 70 mins successful learning!!

- You will have to choose
- Each is work a total 25 marks
- There are several different challenges and tasks in each question
- That's a grand total of 115 marks you can achieve

Helpful hints....

- How much is each question worth (Look at the marks available!!!)
- Check, Check and Check again!
- What is the question actually asking you to do?!
- Analyse? Use the learning to examine and interpret/say what its meaning is
- **Discuss?** Look at both sides of the point/argument
- **Reflect?** Think carefully about the point using the learning as *P.E.E.L*
- **Evaluate?** Form an overall idea about a point using the learning
- **Detail?** *Provide the relevant information about this point*

Question Themes

A number of questions may involve reading OS maps

• Volcanoes(Causes, Affects, Hazards)

• Earthquakes and Tsunamis

(Types, Hazards, Eruption Affects, Structure)

Climate Change

(Greenhouse Effect, Renewable Vs. Non Renewable) • Glaciers

(Glaciers, formations, processes, tourism)

• Weather

(Tornadoes, Hurricanes, Hazards, Impacts)

Settlements

(Shopping, housing, economics, crime)

Tools to revise

- Your folders
- Any Textbooks (that of course have the relevant topics in)
- The ipads :

http://www.bbc.co.uk/education/subjects/zrw76sg https://www.doddlelearn.co.uk/ http://www.s-cool.co.uk/gcse/geography http://www.geography-site.co.uk/

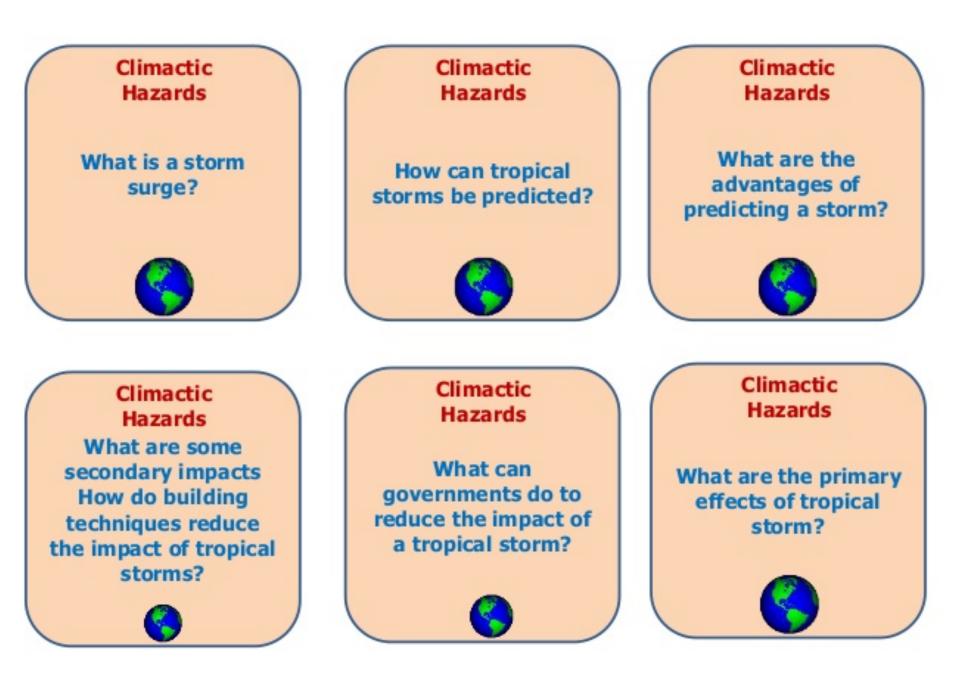
http://www.geography.learnontheinternet.co.uk/

DO NOT JUST HIGHLIGHT YOUR NOTES/WORK

- Quick Fire Quizzes between yourselves
 - Silent self-quizzing
 - Flash Cards/Mix and Match games
 - Summarising an idea/concept
 - Sketch noting (see examples)
 - Timed Challenges (self/peers)
 - Knowledge organisers (see examples)

Your books hold the most pertinent (important) pieces of learning (bottom of book sections?)

OAKFIELD ACADEMY BELIEVE AND ACHIEVE							
	Home	Academy	Parents	Pupils	Whats On		
				Homework	k and Revision		
				Oakfield's	Little Lessons		
				Scholarshi	p & Greater Dep	oth	
Accelerated Reader	"The worst thing a child can say about homework is that it is too hard. The worst thing a child can say about a game is it's too easy." Henry Jenkins, Professor of Digital Media at University of Southern					KS2&3 English Bitesize	
Accelerated Reader					Brian Bilston's Poetry		
Time Table Rockstars	> C	 Challenge what you have already learnt, 				VS29.2 Mathe	
TLMEY TABLEY 9044 9TABY	> Allow you to do some 'purposeful practice' (applying your learning properly), Bitesize						
My Maths	The ass on	o prepare you for the r e links down the left ha ess how well and hard the right are some key p vou be successful. Ke	nd side are some of you are working on documents and link	the ways we set an your homework, ar ts for each subject t	nd	UK IXL Maths & English	







Central tube which the magma travels through Larger material thrown out by the force of the eruption Material thrown out by the volcano Magma, once it reaches the surface Large underground pool of magma Bowl-shaped basin in the top of the volcano

The structure of the Earth					Volcanic	
The	Crust	Varies in thickness (5-10km) beneath the ocean. Made up of several large plates.	Ash cloud	Small pieces of pulverised rock glass which are thrown into the atmosphere.		
The Mantle Widest layer (2900km thick). The heat and pressure means the rock is in a liquid state that is in a state of		Gas	car	Sulphur dioxide, water vapour carbon dioxide come out of the volcano.		
	Convection. Hottest section (5000 degrees).			rur	A volcanic mudflow which usua runs down a valley side on the volcano.	
	Inner outer e	Mostly made of iron and nickel and is 4x denser than the crust. Inner section is solid whereas outer layer	Pyroclastic flow	A fast moving current of super- heated gas and ash (1000°C). T travel at 450mph		
		Convection Currents	Volcanic	A 1	LIC -CS	
٦	he crust is	divided into tectonic plates which are n convection currents in the mantle.	bomb	eje	Causes On a conservative plate margi plates.	
1		ive decay of some of the elements in the a lot of heat.	le	The <u>magnitude 7.0 earthquak</u> Prince. With a very <u>shallow fo</u>		
2	When lower parts of the mantle molten rock (Magma) heat up they become less dense and slowly rise .				Effects 230,000 people died and 3 mil affected. Many emotionally at	
3	As they move towards the top they cool down, become more dense and slowly sink .				250,000 homes collapsed or v damaged. Millions homeless Rubble blocked roads and shu	
4	These circular movements of semi-molten rock are convection currents					
	Convection currents create drag on the base of the tectonic plates The Ch					

Types of Plate Margins

Destructive Plate Margin

d this causes them to make

5

When the denser plate subducts beneath the other, friction causes it to melt and become molten magma. The magma forces its ways up to the surface to form a volcano. This margin is also responsible for devastating earthquakes.

Constructive Plate Margin

Here two plates are moving apart causing new magma to reach the surface through the gap. Volcanoes formed along this crack cause a submarine mountain range such as those in the Mid Atlantic Ridge.

Conservative Plate Margin

A conservative plate boundary occurs where plates slide past each other in opposite directions, or in the same direction but at different speeds. This is responsible for earthquakes such as the ones honnoning clong the Con Androos Foult LICA







Volcanic Hazards	;
ces of pulverised rock and ch are thrown into the ere. dioxide, water vapour and ioxide come out of the	acid eruption cloud eruption a preve column pyroclastic flow dome a lava dome a lava landali
c mudflow which usually m a valley side on the	pyroclastic flow
oving current of super- as and ash (1000°C). They	lahar earthquakes

LIC -CS: Haiti Earthquake 2010

- - conservative plate margin, involving the Caribbean & North American
 - nagnitude 7.0 earthquake was only 15 miles from the capital Port au e. With a very shallow focus of 13km deep.

00 people died and 3 million ed. Many emotionally affected. 00 homes collapsed or were ged. Millions homeless. e blocked roads and shut down

Management Individuals tried to recover people. Many countries responded with appeals or rescue teams. Heavily relied on international aid, e.g. \$330 million from the EU. 98% of rubble remained after 6 AQA months.

The Challenges of Natural

What is a Natural Hazard

A natural hazard is a natural process which could cause death, injury or disruption to humans, property and possessions.

	Geological Hazard	Meteorological Hazard		
ret	These are hazards caused by land and tectonic processes.	These are hazards caused by weather and climate.		

Causes of Earthquakes

Earthquakes are caused when two plates become locked causing friction to build up. From this stress, the pressure will eventually be released, triggering the plates to move into a new position. This movement causes energy in the form of seismic waves, to travel from the focus towards the epicentre. As a result, the crust vibrates triggering an earthquake

The point directly above the focus, where the seismic waves reach first, is called the EPICENTRE.

SEISMIC WAVES (energy waves) travel out from the focus.

The point at which pressure is released is called the

	Managing Volc	Managing Volcanic Eruptions				
	Warning signs	Monitoring techniques				
prevailing wind	Small earthquakes are caused as magma rises up.	Seismometers are used to detect earthquakes.				
pyroclastic flow landslide	Temperatures around the volcano rise as activity increases.	Thermal imaging and satellite cameras can be used to detect heat around a volcano.				
	When a volcano is close to erupting it starts to release gases.	Gas samples may be taken and chemical sensors used to measure sulphur levels.				
a start	Preparation					
earthquakes	Creating an exclusion zone around the volcano.	Being ready and able to evacuate residents.				
2	Having an emergency supply of basic provisions, such as food	Trained emergency services and a good communication system.				
	Fauthauseles 8					

Earthquake Management

PREDICTING

Methods include:

- Satellite surveying (tracks changes in the earth's surface)
- Laser reflector (surveys movement across fault lines)
- Radon gas sensor (radon gas is released when plates move so this finds that)
- Seismometer
- Water table level (water levels fluctuate before an earthquake).
- Scientists also use seismic records to predict when the next event will occur.

PROTECTION

You can't stop earthquakes, so earthquake-prone regions follow these three methods to reduce potential damage:

- Building earthquake-resistant buildings
- Raising public awareness
- Improving earthquake prediction

HIC - CS: Eyjafjallajokull (E15) Eruption, Iceland 2010

Causes

The North-American and Eurasian plates move apart or constructive plates.

The disruption caused by Eyjafjallajökull was the result of a series of small volcanic eruptions from March to October.

Effects

The thick ice cap melted which caused major flooding. No reported deaths. Airspace closed across Europe, with at least 17,000 flights cancelled Costed insurers £65m to cancelled flights.

Iceland had a good warning system with texts being sent to residents within 30 minutes. Large sections of European airspace were closed down due ash spread over the continent.

Management

Airlines developed ash



Global pattern of air circulation			Changing pattern of Tropical Storms			
Atmospheric circulation is the large-scale movement of air by which heat is distributed on the surface of the Earth.			Scientist believe that global warming is having an impact on the frequency and strength of tropical storms. This may be due to an increase in ocean temperatures.			
Hadley cellLargest cell which extends from the Equator to		and a		Management of Tropical Storms		
	between 30° to 40° north & south.			Protection	Aid	
Ferre cell	Middle cell where air flows poleward between 60° & 70° latitude.		Preparing for a tropical storm may involve construction projects that will improve protection.	Aid involves assisting after the storm, commonly in LIDs.		
Polar cell	Smallest & weakness cell that occurs from the poles	Contraction (Contraction)		Development The scale of the impacts	Planning Involves getting people and	
Distribution of Tropical Storms. High and Low Pressure			depends on the whether the country has the resources cope with the storm.	the emergency services ready to deal with the impacts.		
	ey are known by many names, including hurricanes (North merica), cyclones (India) and	Low Pressure	High Pressure	Prediction	Education	
typho all oc	oons (Japan and East Asia). They ccur in a band that lies roughly 5-	Caused by Caused by hot air cold air rising. sinking.		Constant monitoring can help to give advanced warning of a tropical storm	Teaching people about what to do in a tropical storm.	
15° either side of the Equator.		Causes stormy, cloudy weather Causes clear and cloudy weather Causes clear and cloudy cloudy clear and cloudy weather		Primary Effects of Tropical Storms		
				The intense winds of tropical storms can destroy when the communities, buildings and communication networks.		
				 As well as their own destructive energy, the winds can generate abnormally high waves called storm surges. Sometimes the most destructive elements of a storm are 		
				these subsequent high seas and flooding they cause to		
Formation of Tropical Storms			 Secondary Effects of Tropical Storms People are left homeless, which can cause distress, poverty and ill health due to lack of shelter. Shortage of clean water and lack of proper sanitation makes it easier for diseases to spread. Businesses are damaged or destroyed causing employment. 			
The sun's rays heats large areas of ocean in the summer and						
1 autumn. This causes warm, moist air to rise over the particular spots						
Once the temperature is 27° , the rising warm moist air leads to a low pressure . This eventually turns into a thunderstorm. This			Shortage of food as crops are damaged.			
causes air to be sucked in from the trade winds .			Case Study: Typhoon Haiyan 2013 🧩			
 With trade winds blowing in the opposite direction and the rotation of earth involved (Coriolis effect), the thunderstorm will eventually start to spin. 			Causes Started as a tropical depression on 2 rd November 2013 and gained strength. Became a Category 5 "super typhoon" and made landfall on the Pacific islands of the Philippines.			
4	4 When the storm begins to spin faster than 74mph , a tropical storm (such as a hurricane) is officially born.		Effects Management			
5	 With the tropical storm growing in power, more cool air sinks in the centre of the storm, creating calm, clear condition called the eye of the storm. 			 Almost 6,500 deaths. 130,000 homes destroyed. Water and sewage 	 The UN raised £190m in aid. USA & UK sent helicopter carrier ships deliver aid 	
6	When the tropical storm hits la (the warm ocean) and it begins			systems destroyed had caused diseases .	remote areas.Education on typhoon	

(the warm ocean) and it begins to lose strength. Eventually it

will (blow itself out)

per typhoon" and the Philippines.

ent

- N raised £190m in
- UK sent helicopter r ships deliver aid te areas.
- Education on typhoon preparedness.

Case Study: UK Heat Wave 2003



Causes The heat wave was caused by an anticyclone (areas of high pressure) that stayed in the area for most of August. This blocked any low pressure systems that normally brings cooler and rainier conditions.

Effect

- People suffered from heat strokes and dehydration. • 2000 people died from
 - causes linked to heatwave. Rail network disrupted and
- crop yields were low.

Management

- The NHS and media gave guidance to the public.
- Limitations placed on water use (hose pipe ban).
- Speed limits imposed on • trains and government created 'heatwave plan

What is Climate Change?

Climate change is a large-scale, long-term shift in the planet's weather patterns or average temperatures. Earth has had tropical climates and ice ages many times in its 4.5 billion years.

Recent Evidence for climate change.					
Global temperature	Average global temperatures have increased by more than 0.6°C since 1950 .				
Ice sheets & glaciers	Many of the world's glaciers and ice sheets are melting. E.g. the Arctic sea ice has declined by 10% in 30 years .				
Sea Level ChangeAverage global sea level has risen by 10-20cms in th past 100 years. This is due to the additional water					
Enhanced Greenhouse Effect					

Recently there has been an increase in humans burning fossil fuels for energy. These fuels (gas, coal and oil) emit greenhouse gases. This is making the Earth's atmosphere thicker, therefore trapping more solar radiation and causing less to be reflected. As a result, the Earth is becoming warmer.

Orbital Changes	Some argue that climate change is linked to how the Earth orbits the Sun, and the way it wobbles and tilts as it does it.				
Sun Spots	Dark spots on the Sun are called Sun spots. They increase the amount of energy Earth receives from the Sun.				
Volcanic	Volcanoes release large amounts of dust containing				
Managing Climate Change					
	ire new technology designed ice climate change.	Planting Trees Planting trees increase the amount of carbon is absorbed from atmosphere.			
International	Agreements	Renewable Energy			

Countries aim to cut emissions by

signing international deals and by

Replacing fossil fuels based energy with clean/natural sources of energy.

Emotional grief for dead. •

Topic:

Essential Processes/Elements learnt

Key words:

Key Locations/Case Studies involved:

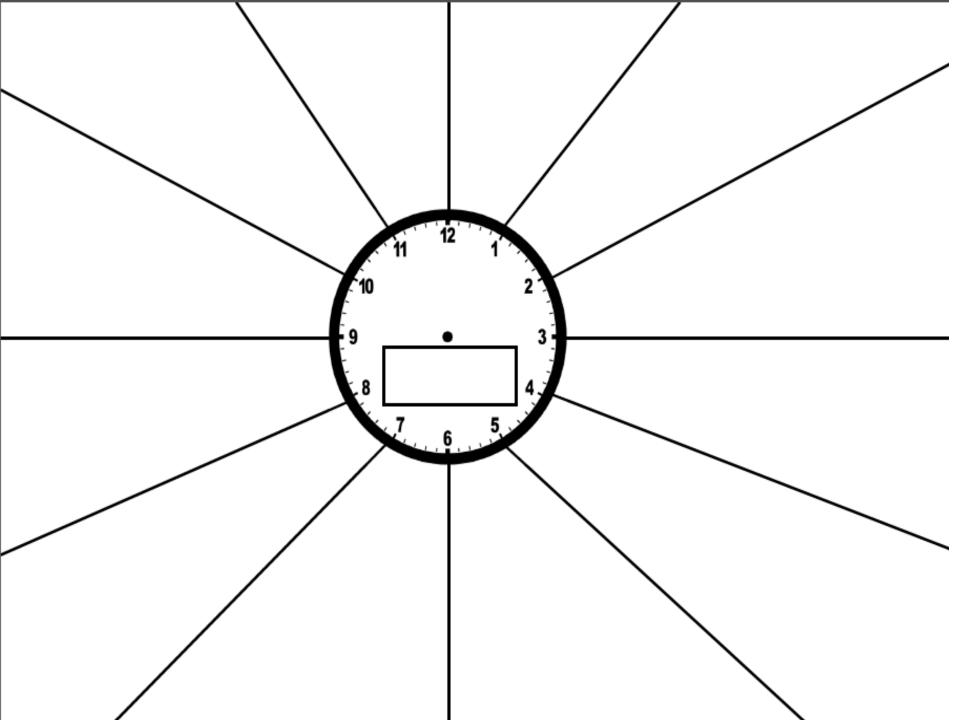
What questions do I think might be asked of me?

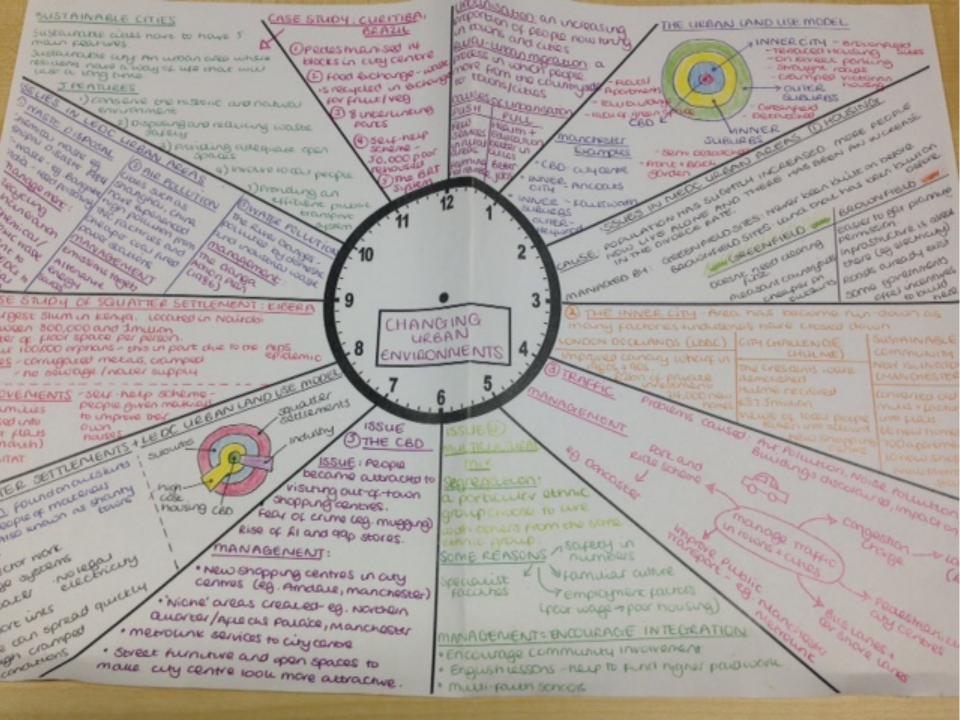
What diagrams/ sketches might I need to revise to develop my learning?

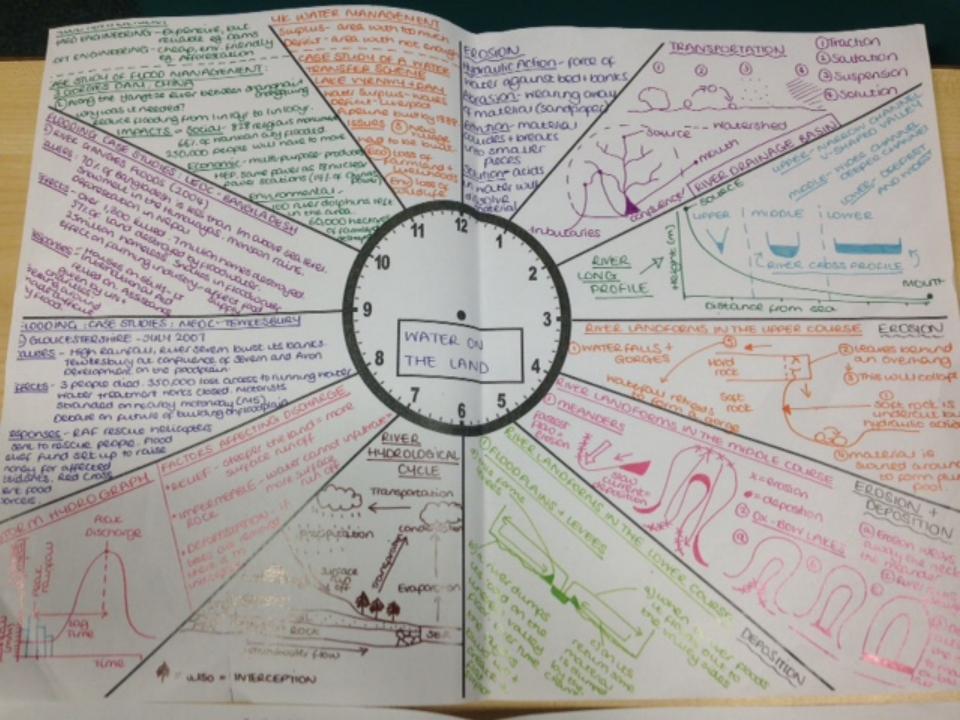
Physical/Human parts of the Topic

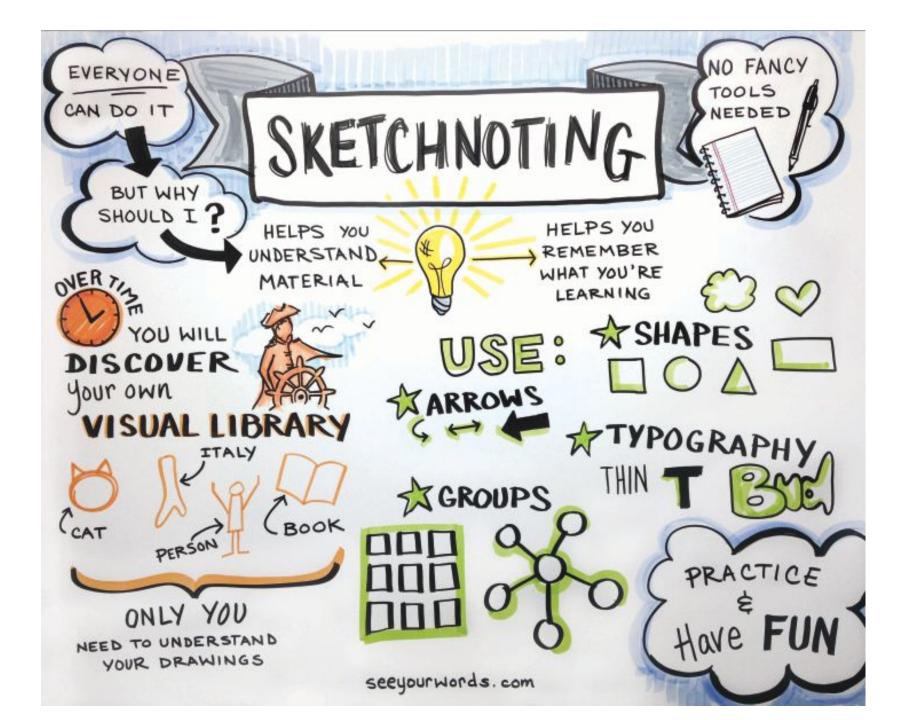
How confident am I in my learning of this topic?

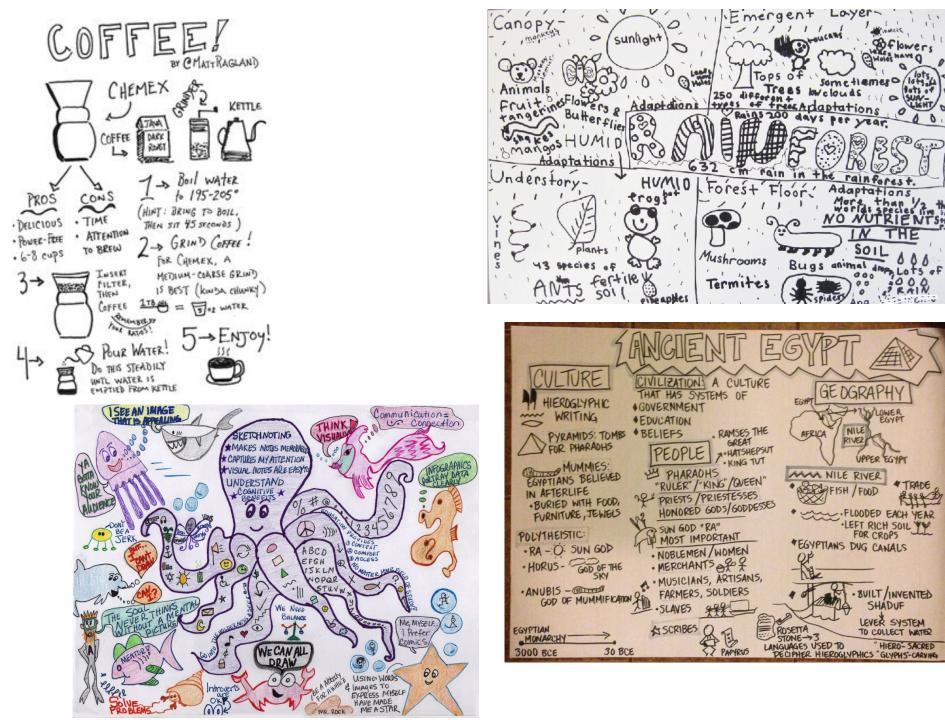
Red/ Amber or green?

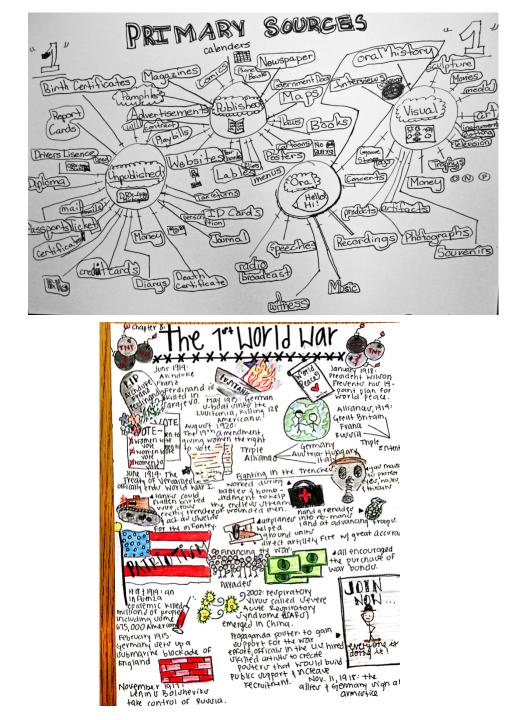
















Homework

• To revise in the best way for you!

 You will be set a number of Doddle quizzes to support you, use these in a way that works for you