DIXONS SIXTH FORM ACADEMY

SUMMER WORK

A LEVEL GEOGRAPHY

2024

STUDENT NAME:

Contents

About the Summer Work 2
Welcome to Geography 3
Subject outline 3
Careers & Higher Education 4
Links to key information: 5
Task 1 – Current Affairs Log 6
Task 2 – Mini NEA Pilot Survey 7
Optional – Super Curricular Tasks 17
Reading list 22

About the Summer Work

This booklet contains a number of tasks that students are expected to complete to a good standard in order to be able to be enrolled in this subject.

Please complete these tasks on A4 paper and bring them with you to the first lesson.

The work handed in should be:

- written in black or blue ink on A4 lined paper
- written in full sentences with no copying and pasting from external sources
- have all compulsory tasks completed
- Have student's full names on each sheet
- multiple sheets should be connected together

This booklet also contains significant additional information and a range of optional tasks. We would encourage you to complete all the tasks including the optional ones to fully prepare for Sixth Form study.

The tasks are designed to build on your knowledge from GCSE and give you greater understanding of the first unit of study and also to help develop your geographical thinking and skills to prepare you for the course. This work should take you maximum 10 hours to complete.

Welcome to Geography

Subject outline

Welcome first year A-level Geographers! Great choice of A-level, we look forward to seeing you in August! Hopefully you are ready to get started on a fantastic A-level course where you will have the chance to really enhance your understanding of the world around you and develop an understanding of some of the biggest and most important issues facing our world today. Whether it is making sense of natural disasters, such as the unprecedented floods in Dubai in 2024, or killer earthquakes in Turkey and Morocco in 2023 or understanding some of the worlds current conflicts in Europe and the Middle East, there has never been a better or more important time to study A level Geography. At A Level, the course hinges around vital human and physical issues from climate change, natural hazards, water conflicts and energy security, to shifting geopolitical superpower status, globalisation, migration, identity and global governance. Please see the course summary on the next page for overview of the course content. Geography provides a lens for analysing the biggest issues facing the world today and as it straggles the arts, social sciences and science subjects, it uniquely combines with any subject combination and equips you with a huge range of skills desired by universities and employers alike.

The work in this booklet is designed to help you make the best possible start to the course. The work is intended to connect with some of the learning you may already have done at GCSE level and to extend this by setting out a framework for geographical thinking, as well as stimulating enquiry into what is happening in our world.

The core skills and attributes that an A-Level geographer will develop are critical thinking, decision making and essay writing. In addition, the coursework allows students to develop the whole breadth of enquiry skills based on 4 days compulsory fieldwork in which you will develop practical research and investigation skills, resulting in the production of your own project worth 20% of the course.

A successful Geography student is passionate about the subject, with a desire to understand the world around them and identify possible solutions to current global issues. This desire should fuel students to create a high level of studentship both within and outside of lessons. Outside of lessons, students should undertake 5 hours of study a week, consolidating classwork, creating revision materials, planning and answering exam questions and extending knowledge though wider reading and research.

What will I study?

You will be studying the Pearson Edexcel A Level Geography specification. A summary of the key content is shown below.

You can view the full specification and access all past papers on the exam board website to gain an understanding of what the assessment looks like.
Edexcel A level Geography (2016) | Pearson qualifications

Year 12	**Topic 1:** Tectonic Processes and Hazards **Topic 2:** Landscape Systems, Processes and Change – a choice of **either** 2A Glaciated Landscapes and Change **or** 2B Coastal Landscapes and Change	**Topic 3:** Globalisation **Topic 4:** Shaping Places – a choice of **either** 4A Regenerating Places **or** 4B Diverse Places
	Physical Systems and Sustainability	**Human Systems and Geopolitics**
Year 13	**Topic 5:** The Water Cycle and Water Insecurity **Topic 6:** The Carbon Cycle and Energy Security	**Topic 7:** Superpowers **Topic 8:** Global Development and Connections – a choice of **either** 8A Health, Human Rights and Intervention **or** 8B Migration, Identity and Sovereignty

How this course is assessed

Paper 1 – Physical Geography- 30% of A Level – 2h 15mins

Paper 2 – Human Geography- 30% of A Level – 2h 15mins

Paper 3 – Synoptic Paper- 20% of A Level – 2h 15mins

Coursework: 20% of A Level.

Careers & Higher Education

Geography graduates are very employable, with the skills, knowledge and understanding gained during a geography degree held in high regard by employers. Geography is concerned with the real world, past, present and future, and is viewed by the top universities in the country as one of the eight facilitating subjects, i.e. it opens a much wider range of options at university and beyond. It is also a part-STEM (Science Technology Engineering and Maths) subject on the list of recognised subjects for Medical School and related courses.

Geography graduates have one of the highest rates of graduate employment, pursuing a wide range of career paths. It's often said that there is no such thing as a geography job; rather there are multiple jobs that geographers do.

When taken with Sciences and Mathematics, Geography supports applications for almost any science-based university course like Engineering, Psychology, Environmental Sciences, Natural Science, Oceanography and Geology. As a part-STEM subject and one recognised as

a facilitating subject for Medical School, it is a good subject to run alongside Biology, Chemistry or Physics.

Taken with Social Sciences, Geography combines well with Economics, Business (significant overlap with economic geography of globalisaiton, regeneration and superpowers) Pscyhoogy (overlap with research methods and statistical testing), supports an equally wide range of university courses such as Law, Business, Media, Politics and Philosophy.

For more information about study a Geography degree please follow the following links

www.thecompleteuniversityguide.co.uk/league-tables/rankings/geography-and-environmental-science

https://www.rgs.org/geography/choose-geography/careers/

https://www.rgs.org/schools/teaching-resources/going-places-with-geography-brochure/

Links to key information:

Geography Course Information Guide

Edexcel A-Level Specification

Physics and Maths Tutor - Geography

Task 1 – Current Affairs Log/Geography in the news

Geography learning is about making sense of the big issues facing the world today. To help develop your awareness of real world events, you are going to log 10 news stories over the summer which are related to the units we will be studying. Use the 'What will I study' table as a guide to topics. We will be using these in the first lesson.

There are many good news websites you can use for free, and others you can subscribe to. News websites include –

- www.bbc.co.uk
- www.independent.co.uk

Most newspapers have downloadable apps. This is a really good way of keeping track of current affairs. The BBC news app even allows you to set up 'My News' so that you can edit a list of topics.

Good topics/ key words for A Level Geography include: Earthquake, Volcano, Tsunami, Landslides, Water, Carbon, Energy, Climate change, Global Warming, Superpowers, Emerging powers, Globalisation, Regeneration, Rebranding, Poverty, Migration, Identity, Sovereignty.

You can also add specific places or events so you can get updates on useful case studies.

Whenever you notice something on the news that you think links to the Geography you will cover at A-level make a note in the table below.

Notes do not have to be detailed, they just need to include a summary of the article.

E.g. May 2019 China-USA trade war. USA imposing trade tariffs on Chinese imports. Meant to be protecting US firms, but US firms end up paying more for the goods from China.

Date accessed	Source of Article- TV news, newspaper, online newspaper	Overall Topic- how related to course? Which topic/s?	Overview of the article in your own words

Task 2 – Tectonic hazards introduction

The first topic you will study is tectonic processes and hazards, which should link well with the work you have already done at GCSE.

Topic 1: Tectonic Processes and hazards

This topic looks at the processes that pose a large risk to many part of the world. There are many places in world where there is an interaction between these dangerous processes and high population density. This topic addresses how and why some places are more vulnerable than others.

This is looked at through three key questions:
1) Why some locations are more at risk from tectonic hazards?
2) Why do some tectonic hazards develop into disasters?
3) How successful is the management of tectonic hazards and disasters?

Scan the QR code or click on the link to the key resource below and use this information to answer the questions which follow.

Key resource to use:
Essential Notes - Tectonics - Edexcel Geography A-level - Edexcel Geography A-level Tectonics - StuDocu

Other sources:
Edexcel A Level Geography - Tectonics EQ1 Revision - Bing video

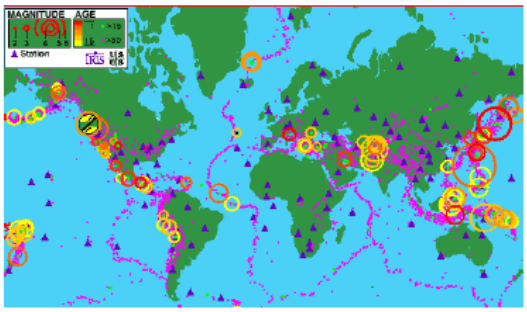
EQ1: Why are some locations more at risk from tectonic hazards? (coggle.it)

Tectonic Processes and Hazards

Enquiry question 1: Why are some locations more at risk from tectonic hazards?

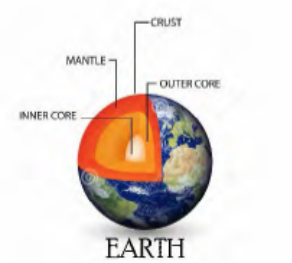
The Global Distribution of Hazards

Earthquakes, Active Volcanoes, and Plate Tectonics



- A **hazard** is a potential threat to human life and property.
- A natural hazard can be either hydro-meteorological (caused by climatic processes) or geophysical (caused by land processes).
- Geophysical hazards occur near plate boundaries. These plates move at different speeds and directions which can cause collisions, earthquakes and volcanic activity as shown in the map.
- Earthquakes can also occur near the middle of plates (called intra-plate). The causes of this are not fully understood but it is assumed that plates have pre-existing weaknesses which become reactivated, forming seismic waves. For example, an intraplate earthquake may occur if solid crust, which has weakened over time, cracks under pressure.
- Volcanic hotspots, such as the Ring of Fire, are also situated amongst the centre of pates. This is a localised area of the lithosphere (Earth's crust and upper mantle) which has an unusually high temperature due to the upwelling of hot molten material from the core.
- At hotspots, such as the Hawaii hotspot, magma rises as plume (hot rock).

Plate Tectonics and Theories



- The Earth's structure, as shown in the picture, is divided into four sections.
- Plate Tectonic Theory:
  - The earth's crust is divided into a series of plates. These plates are either oceanic (thin and dense) or continental (thick).
  - Radioactive reactions occur inside the core which produces convection currents in the mantle. This causes the tectonic plates to move.
  - At mid-ocean ridges, there is a push and slab pull. This is the process of subduction where oceanic plates are pushed under continental as oceanic plates are heavier.
  - The Pacific Plate is one such example which has a lot of subduction around its edges.
- Plate Tectonic Theory is believed to be correct due to evidence from Wegner's Continental Drift Theory which states that the shapes of South America and Africa seem to fit together so were once part of a supercontinent. As plates moved, the continent separated.
- Another piece of evidence is studying how seismic waves travel through the Earth. Along the Wadati-Benioff foci, the depth of waves shows subduction of the denser basaltic oceanic plates into the upper mantle.
- Sea Floor Spreading: This occurs when two oceanic plates move away from each other, allowing magma from the mantle to rise and form new crust ridges within the ocean, resulting in the sea floor widening.
- When the magnetic patterns of cooled magma (palaeomagnetism) were studied, it was discovered that the magnetic patterns were arranged in the direction of the earth's magnetic field which flipped every millions of years. This helps identify the age of the oceanic crust, by studying the youngest rocks at ridges, and proves that the earth did once fit together.

Types of Plates

- Conservative – Plates move past each other but at different speeds, causing friction and collisions
- Constructive – Plates moving apart from one another

➔ Destructive – Plates move towards each other, colliding head on if both continental. If one is continental and the other is oceanic, subduction will occur where the oceanic plate is thrust under the continental. If there are two oceanic plates, the heavier plate will be forced under the other.

Causes and Impacts of Earthquakes, Volcanic Eruptions and Tsunamis

1) **Earthquakes:**
   - The most powerful earthquakes occur at destructive and conservative boundaries.
   - At constructive boundaries: Plates move at different speeds which builds pressure until plates crack, causing fault lines. This results in the release of seismic waves, producing earthquakes.
   - At destructive, one plate is forced under the other, getting stuck due to friction which produces energy. As plates suddenly jerk past one another, this energy is quickly released, forming a powerful earthquake.
   - At a conservative boundary, plates lock with one another which, when pressure is built, produces sudden seismic waves.
   - Seismic waves can be split into categories. The P waves cause the immediate shock whilst the S wave has a longer wavelength and arrives seconds later. L waves only travel through the crust, causing horizontal movement. These waves can also result in crustal fracturing (producing faults) and secondary hazards such as landslides, avalanches and liquefaction.

2) **Tsunamis:**

   - Tsunamis are produced by sub- marine earthquakes at subduction zones, causing water displacement and deep trough waves.
   - This hazard is always secondary to earthquakes, adding to death tolls. Tsunamis present additional damage to vulnerable communities such as costal erosion, which is a case in Malibu/Santa Monica in California.
   - The movement of plates under the ocean causes an uplift of ocean water, disrupting the sea bed.
   - The 1964 earthquake on the Alaskan Coast caused a northern Californian tsunami, killing 12 in Crescent City.

3) **Volcanic Hazards:**
   - The world's active volcanoes are found at constructive and destructive plate boundaries, and at hotspots. These volcanoes eject magma, gases, ash and dust.
   - At constructive margins, magma is less dense than the plate so rises above it, forming a volcano, such as those within the Rift Valleys.
   - At destructive margins, subduction causes the melting of the oceanic plate, allowing for magma to rise on the crust to form a volcano. This produces explosive volcanoes such as Mt. St. Helens in the Ring of Fire.

   - The shape of a volcano determines its destructive ability. A super-volcano is the most destructive but seldom occurs. A composite cone is said to be more dangerous than a shield volcano.
   - Volcanic hazards involve lava flows and phreatic eruptions. Away from the volcano, the greatest threats are pyroclastic flows which carry heated rock and ash over larger distances.
   - Secondary hazards involve water in the form of lahars (mudflows/typhoons) and jokulhlaups (glacial floods).

Why are some locations more at risk from tectonic hazards?

The global distribution of tectonic hazards

Hazards are natural events that have an adverse impact on people, the economy and society. Tectonic hazards include earthquakes and volcanic eruptions, as well as secondary hazards such as tsunamis. The global distribution of these hazards is largely explained by the pattern of plate boundaries and their tectonic processes.

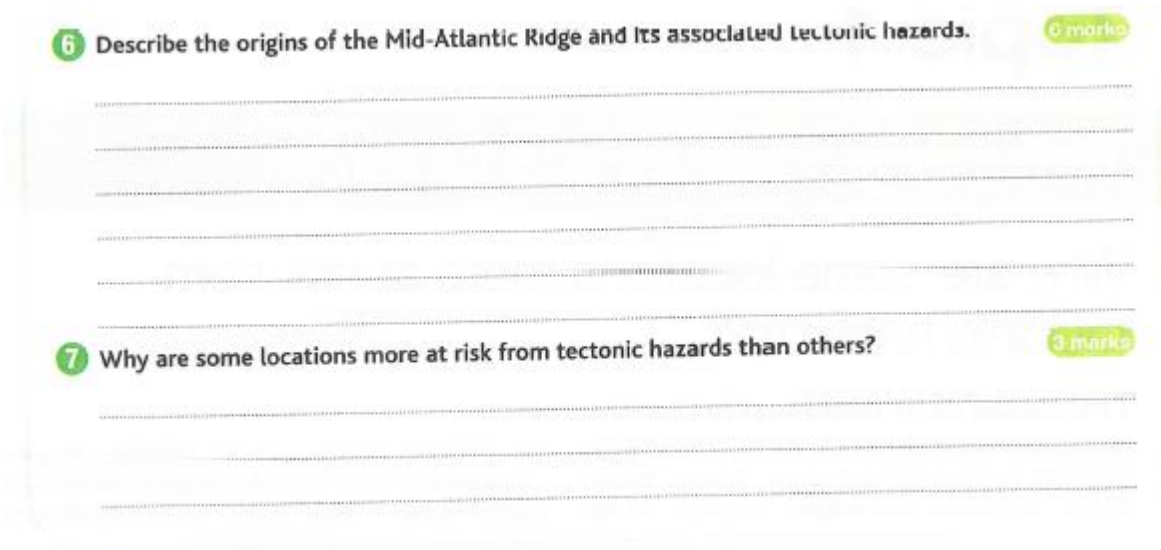
1 What is meant by a *plate boundary?* 2 marks

2 Name the FOUR types of plate boundary. 4 marks

3 Identify the TWO plate boundaries where the most powerful earthquakes occur. 2 marks

4 Identify the TWO plate boundaries where most volcanoes occur. 2 marks

5 What are *hotspot volcanoes* and where do they occur? 4 marks



6 Describe the origins of the Mid-Atlantic Ridge and its associated tectonic hazards. 6 marks

7 Why are some locations more at risk from tectonic hazards than others? 3 marks

Task 3- Investigation into a recent tectonic event

Geography is a way of thinking about the world which helps make sense of the big issues facing the world today such as hazards, migration, climate change and globalisation. These issues can be explored through four key categories of thinking, as shown in the geographical filing cabinet.

Geography is about making sense of the big issues which face the world today by investigating…

- **What? NATURE/ LOCATION/ CHARACTERISTICS of ISSUE**

(Location, characteristics, facts)

- **Why? CAUSES OF EVENT OR ISSUE**

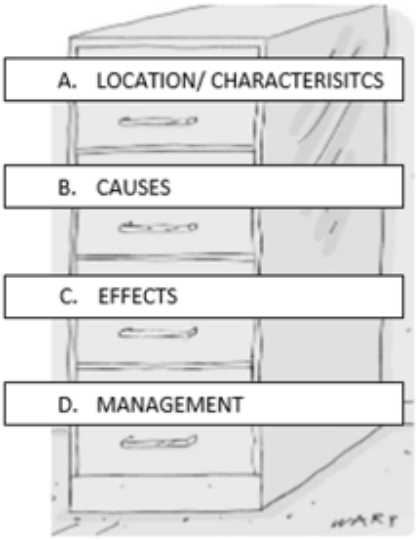
(Human and physical)

- **What impacts? EFFECTS**

(Social, Economic, Environmental and Political)

- **How managed? MANAGEMENT**

(by timescale- short, medium and long term and by scale- local, national, regional or international)



The filing cabinet of Geography, Dr S King

Choose a tectonic event which has happened in the last few years and develop a case study analysis of the event. You can choose an earthquake, volcano or tsunami. There are some examples below and you can view satellite imagery of the events by opening the link, either by clicking on the hyperlink or scanning the QR code [Natural Disasters 2022: Terrible Losses And Valuable Lessons (eos.com)]

Some examples from 2022 include:

Natural Disasters 2022: Volcanic Eruptions And Earthquakes

Neither large-scale volcanic eruptions nor earthquakes of magnitude 6.5 or greater are common occurrences. However, early detection of a disaster is not always achievable, especially in the case of a volcanic eruption. More in-depth research into these natural disasters, particularly with the help of satellite monitoring, is now required to improve early danger identification, preparedness, and resilience building, all of which have the potential to minimize the harmful impact of natural disasters.

Indonesia Earthquake In 2022

On November 21, 2022, an earthquake measuring 6.5 magnitudes hit the Cianjur District and much of West Java Province. The hundreds of aftershocks hampered recovery after this natural disaster of 2022. Some people were buried in buildings that collapsed or were carried away by a landslide. Thus, the rescue operations shifted to search and recovery only after a few days.

Official numbers show 321 confirmed deaths, 595 serious injuries, and over 10,000 minor injuries due to the recent 2022 natural disaster. The government estimates that 73,874 individuals have been displaced from their homes and over 62,000 dwellings have sustained damage. The earthquake worsened the humanitarian crisis even more by destroying 342 educational institutions.

China Earthquake In 2022

On September 5, 2022, a powerful earthquake with a magnitude of 6.6 struck the Sichuan province of China. Hundreds of kilometers away from the natural disaster epicenter, more than a million people in Garzê Tibetan Autonomous Prefecture (Ganzi), as well as the provinces of Shaanxi and Guizhou, felt the shocks of the earthquake. Aftershocks of differing magnitudes have continued to occur. This quake is among the largest natural disasters of the kind in recent memory for the Sichuan province.

Hunga Tonga-Hunga Ha’apai Eruption In 2022

Hunga-Tonga-Hunga-Ha’apai (HTHH), a volcano in Tonga, erupted on January 15, 2022, with an explosion more immense than anything seen since Krakatoa’s 1883 eruption natural disaster. The eruption generated up to 15-meter tsunami waves and hit the west coasts of Tongatapu, ‘Eua, and Ha’apai. Harbors and shores as far afield as Peru and Chile in the eastern Pacific and Japan in the northwest Pacific were hit by the destructive waves of this 2022 natural disaster.

Surveillance flights and satellite monitoring revealed extensive natural disaster’s damage to homes, roads, and other infrastructure on the western shores of Tongatapu, the Ha’apai island group, and ‘Eua. Authorities estimated that 84,176 people (or 84% of the population) on Tongatapu, Ha’apai, and ‘Eua were impacted

by the ashfall, which covered an area of five square kilometers. The HTHH eruption and the following tsunami caused the deaths of four people.

	
Present your case study in a format of your choice- as a mind map, poster, table, powerpoint, publisher, report	Do not make linear notes
Make sure your case study is structured	Do not just list information
Keep within 2 sides of A4 or one A3 poster size	Do not exceed 2 sides of A4 or one A3
Write in your own words	Do not copy and paste
Make a list of sources of information you have used (this is a reference list or bibliography)	Just rely on one source of information

Optional – Super Curricular Tasks

These tasks are designed to stretch your love of learning and engage in the broader context we will study at A-Level. The more of these you can undertake, the better understanding you will be bringing to your A Level studies.

1. Tectonics

a) Scan the QR code or search Youtube to watch the free documentary to learn more about the biggest volcanic eruptions and most disastrous earthquakes. Use this to make your own notes on a range of case studies

Biggest Volcanic Eruptions & Disastrous Earthquakes | Desperate Hours | Free Documentary

.

b) **Virtual reality experience-** if you have VR headsets, search Youtube for 'Earthquakes and Volcanoes VR' to access many clips of earthquakes and volcanoes to give you a virtual reality

experience. Scan the QR code for one such clip. Write a review to summarise what you have learned from your VR experience- how does it feel?

2. Globalisation- select from at least one of the sources to hone into one of the many issues related to globalisation that we will study as part of the course

A) China's special economic zones: an analysis of policy to reduce regional disparities An open access research paper – Create a 10 Point Fact File once you have read the article

https://www.tandfonline.com/doi/full/10.1080/21681376.2018.1430612

Despite being an academic publication, the language used is accessible with a clear structure to the paper. This paper explains how the implementation of SEZs has led to prosperity in the coastal regions of China but created additional economic disparity between regions. It is therefore proposed that the SEZs are extended or set up in different parts of the country- in order to close the economic gaps. If you want to find out more about how government actions can encourage globalisation, this paper is excellent for extending your knowledge.

B) Is it time to retire the term 'developing country'?

Prospect magazine article – Create a 10 Point Fact File once you have read the article

https://www.prospectmagazine.co.uk/world/is-it-time-to-retire-the-term-developing-country-wto-united-nations-global-inequality

Published in December 2019, this article discusses the nebulous term and the reasons why some of the largest economies in the world are keen to hold onto the classification of a 'developing country'. Much of the information in this article will be new to A-Level students, giving a fresh perspective on the concept of development and you beyond the classifications used at GCSE.

C) **50 Things That Made the Modern Economy: Shipping Container**

BBC Podcast.

https://www.bbc.co.uk/sounds/play/p04g1ddh

In this podcast by the BBC News World Service, the fundamental importance of the shipping container in the global economy is discussed in detail. Whilst you will study containerisation briefly as a means of accelerating globalisation, it is likely that you don't dwell on the significance of this humble metal box for long. For students wanting to go beyond the specification, it is fascinating to consider just how essential container shipping is for their way of life- for the cheap consumer goods and the 'just- in-time' supply chains. Use the podcast to make notes on the following three questions:

- What were the challenges before containerisation?
- Why was containerisation not welcomed at first?
- What has containerisation enabled?

D) World Trade Explorer: How does the UK trade with the rest of the world?

Interactive data tool.

https://www.ons.gov.uk/businessindustryandtrade/internationaltrade/articles/worldtradeexplorer/2019-07-24

This interactive data tool from the ONS helps students to understand how the UK trades with the rest of the world. When a country is selected, the total UK trade is shown as well as the goods balance and services balance. In terms of studying globalisation, this world trade explorer goes some way to showing students the complexity of the global economy and is fascinating to explore. Use the tool to complete the following:

Before using the tool:

- Can you name 3 countries that you think the UK might have a trade deficit with? (we import more than we export).
- For each country, why do you think this?

- Can you name 3 countries that you think the UK might have a trade surplus with? (we export more than we import).
- For each country, why do you think this?

Using the tool:

- Explore the trade relationship with the following countries (all discussed in the globalisation topic) and make notes on what you find: China, America, North Korea, India, and Chad.

E) What makes Delhi's air so deadly?

Vox video.

https://www.youtube.com/watch?v=bVzvZxW5n2Q

The Vox video channel, available on YouTube, has been much-celebrated as an A-Level resource owing to the wide array of topics covered. It is well worth looking through the videos and selecting those most interesting to you. This particular one is useful for thinking more critically about air pollution. The specification discusses air pollution as a negative environmental impact of globalisation and Delhi is often used as an example of a city whose air is particularly deadly but have you considered the array of different conditions that combine to cause such deadly air? This video explains that, encouraging synoptic and critical thinking and thus going beyond the specification. Use the video to explain reasons for Why Delhi's air is so deadly.

3) **Climate change-** watch David Attenborough's fantastic 'Climate Change the Facts' on BBC i Player and use to take your own notes using the thinking hats as a structure:

White Hat Facts		Facts - Names, Numbers, Indisputable
Red Hat Emotions		Emotions - I feel.....
Black Hat Negatives		The danger is that .....
Yellow Hat Positive		Positive - The benefits will be .....
Green Hat Creativity		If only ..... I would love .....
Blue Hat Overview		Recap, Summary of Next Steps

Wider reading list

Books

The Power of Geography (Tim Marshall)

What Does China Think? (Mark Leonard)

Why Nations Fail (Daron Acemoglu and James Robinson

No One Is Too Small to Make a Difference (Greta Thunberg)

The Bottom Billion (Paul Collier)

Ghosts of the Tsunami (Richard Lloyd Parry)

Websites

https://www.geography.org.uk/Student-guidance

https://geographyrevisionalevel.weebly.com/

https://www.bookscrolling.com/the-best-geography-books-of-all-time/