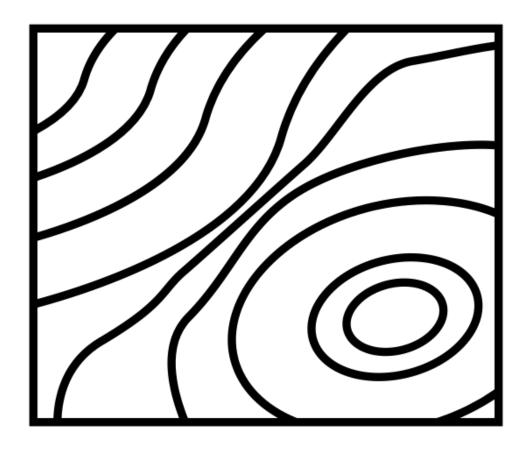
# Home Q&A Booklet



# **Geography**Paper 1



The purpose of this booklet is to support your child with their revision for their GCSE examination.

This booklet is a summary of all the content that your child needs to know and will assist them with regards to preparation for the subject knowledge that they need to apply in the examination. Although the booklet is by no means a guarantee, it will make a significant contribution to their success.

This booklet should be used as a question and answer test booklet so that you can help coach your child into answering content correctly with accuracy. Ideally questions should be worked through at random and use a priority red, amber, green system to prioritise areas to work on.

This booklet is the**minimum**/basic amount of work that your child needs to complete based on the knowledge that they need to have.

What else can your child be doing to revise?

#### They should not:

Simply read over the material. This will not help you remember it.

Highlight lots of text, this gives you a feeling that you are learning it when in fact you are not.

Type up lots of notes.

Revise for hours at a time on the same topic.

#### They should:

Transform the notes.

Create diagrams

Create pictures to represent the material.

Produce flashcards. The process of doing this helps you to learn it.

Test yourself using your flash cards.

Get others to test you using the flash cards.

Turn the events into a stoyboard.

Prioritise- chose the three key points to learn for a given topic.

Go through exemplar answers given in class and learn the rules of how to approach each question.

## <u>Topic 1: Hazardous Earth (Q1 in the exam)</u>

- 1. What is the direction of air movement at the equator?

  Air rises up
- 2. What is the normal weather conditions at a high pressure area or belt?

#### 3. How does atmospheric circulation dstribute heat energy from the equator to the poles?

The sun heats the earth at the equator causing air to warm up and rise. As the air rises it cools and moves away. The cool air sinks and some is drawn towards the poles as surface winds

#### 4. What are the theories about the causes of natural climate change?

The eruption theory

Asteroid collisions

The sunspot theory

The orbital theory/Milankovitch cycles

#### 5. What is the eruption theory?

During big volcanic eruptions, ash and gas can block some unlight reaching the Earth's surface. This cools the planet and lowers the temperature

#### 6. What is sunspot theory?

These are black areas on the sun's surface. Lots of spots means more solar energy being fired out from the sun towards the earth increasing the temperature

#### 7. How can asteroid collisions cause natural climate change?

Large asteroid collisions would blast millions of tonnes of ash and dust into the atmosphere and cool the climate as the sunlight would be blocked.

#### 8. What is the orbital theory? (Sometimes called Milankovitch cycles)

Changes in the earth's orbit affectwhere sunlight falls on Earth

#### 9. What is the difference between weather and climate?

Weather is the day to day conditions e.g. raining, snowing, sunny whereas climate is the average conditions for a time of year e.g. autumn, winter

#### 10. What evidence isthere for past climates?

Fossilised plants, animals and pollen that no longer live in the UK Ice cores

Tree rinas

Landforms like U shaped valleys

#### 11. What are the greenhouse gases?

Carbon dioxide

Methane

Nitrous Oxide

#### 12. What is the enhanced greenhouseffect?

Pollution of the atmosphere with carbon dioxide

#### 13. What is thermal expansion?

When sea water expands as it warms

#### 14. By 2100, estimates predict temperature will increase by how much?

Between 1.1°C and 6.4°C

#### 15. Why is predicting future global warming difficult?

We don't know what the future population will be, whether fossil fuels will continue to be used or if people will change their lifestyles and recycle more or use public transport

#### 16. What are the impacts of climate change?

More frequent floods, droughts and heatwaves.

Stronger storms and hurricanes

Changes to farming as they adapt to new climates

Climate refugees as people evacuate low lying places that are no longer habitable.

#### 17. What is the SaffirSimpson Hurricane scale?

5 different categories to measure wind strength

#### 18. Name the features of tropical cyclones

Circular shape

Hundreds of km wide

Eve at the centre of the cyclone

In the eye, pressure is low and winds are light

Eye wall surrounds the eye

The eyewall have strong winds, torrential rain and a low temperature

#### 19. What is needed for a tropical cyclone to form?

Sea temperatures of 26°C or more

Thunderstorms on the equator

Water depth of 50m or more

No shear winds in the upper atmosphere

#### 20. How can tropical cyclones impact people?

**Buildings** destroyed

Roads damaged

Electricity supplies damaged

#### 21. What impacts can tropical cyclones can have on the environment?

Trees may be uprooted by high winds

Beaches may be erodedby storm surges

Coral reefs may be damaged by storm surges

Harmful chemicals may pollute the environment

#### 22. How can we work out the predicted paths of cyclones?

Satellite imagery

Computer models

Weather forecasting technology

#### 23. Is the air pressure high or low during a tropical cyclone?

Low

#### 24. How can we prepare for tropical cyclones?

Weather forecasting

Satellite technology

Warning Systems

**Evacuation strategies** 

Storm surge defences

#### 25. What are the 4 layers of the earth?

Inner Core

Outer Core

Mantle

Lithosphere/Crust

#### 26. What is the lithosphere?

The uppermost layer of the Earth. It includes the very top of the mantle and the crust.

#### 27. How is the continental cust different from oceanic crust?

Continental crust is thicker

Continental crust is less dense

#### 28. Explain how convection currents cause tectonic plates to move

The core heats the mantle causing the mantle to rise. As it rises it begins to cool and falls again in a circular motion. As the tectonic plates sit on top of the mantle, the circular motion causes the plates to move.

#### 29. What are the different plate boundaries?

Conservative Divergent Convergent Collision

#### 30. What happens at a conservative plate boundary?

Two plates are sliding past each other, earthquakes occur

#### 31. What happens at a divergent plate boundary?

Two plates move apart creating small ethquakes and not very explosive/dangerous volcanoes

#### 32. What happens at a convergent plate boundary?

Two plates collide creating large earthquakes, explosive volcanoes with the potential for tsunamis

#### 33. What is a collision zone?

A type of convergent plate boundary creating mountain ranges such as the Himalayas. Earthquakes can also happen.

#### 34. Explain how earthquakes are caused at convergent plate boundaries.

Tension builds up as one plate get stuck as it moves down past the other into the mantle. The eventually jerk past each other sending our shock waves.

#### 35. Where is the focus of an earthquake?

The point in the crust where the earthquake starts

#### 36. Where is the epicentre of an earthquake?

The point on the earth's surface above the focus

#### 37. How can people prepare for earthquakes?

Earthquake drills

Emergency kits being prepared at home

Earthquake proof buildings where gas supplies cut off to reduce the risk of fire

#### 38. What are primary effects?

Effects which are caused instantly

#### 39. What are secondary effects?

Effects which happen in the hours, days and weeks after the event

#### 40. Why are people in the developing world at a greater risk from hazards than those in developed countries?

They build in risky location because there is nowhere else affordable to live

They can't afford safe, well built houses

They don't have insurance

Their governments don't have the money and resources to provide aid

Communications are poor so warning and evacuation may not happen

# Topic 2- Development Dynamics (Q2 in the exam)

#### 1. What does the phrase 'level of development' mean?

A country's wealth and its social and political progress

#### 2. What are development indicators?

Measures of how a country is improving

#### 3. What are the social development indicators?

Literacy rates

Access to safe drinking water

#### 4. What does HDI stand for?

Human Development Index

#### 5. What is the Human Development Index?

The United Nations measure of development. It is measured between 0 (worst) and 1 (best) using four indicators:

Life expectancy

Literacy rates

Average length of schooling

GDP per capita

#### 6. What is the problem with measuring development just by economic indicators?

Wealth can be distributed unevenly so is not an accurate reflection of the whole country.

#### 7. What is demographic data?

All data linked to the population such as birth rate, death rate, etc.

#### 8. What is population structure?

The number of each sex in each age group

#### 9. What is birth rate?

Number of live births per 1000 people per year

#### 10. What is death rate?

Number of deaths per 1000 people per year

#### 11. What is fertility rate?

The average number of births per woman

#### 12. What is life expectancy?

Average number of years a person can expect to live

#### 13. What is dependency ratio?

The proportion of people below (0-15) and above (over 65) working age added together and divided by the working population (16 64) multiplied by 100. The lower the number, the greater the number of people who work and are less dependent.

#### 14. What is the North South divide?

The divide between countries in the north being richer countries and countries in the south being poorer

#### 15. What does HIC stand for?

High Income Country

#### 16. What does LIC stand for?

Low Income Country

#### 17. What does NIC stand for?

**Newly Industrialising Country** 

#### 18. What are the physical and environmental barriers preventing Malawi from developing?

It's landlocked

Rural isolation

Changing climate

Increased pollution

#### 19. What are the economic and political barriers preventing Malawi from developing?

Terms of trade

Colonisation

Cash crops

Global trade and international relations

#### 20. What are the 5 stages in Rostow's theory?

- 1. Traditional Society
- 2. Pre take off
- 3. Take off
- 4. Drive to maturity
- 5. High Mass Consumption

#### 21. In Frank's theory, what is the core?

The developed powerful nations of the world e.g. North America and Europe

#### 22. In Frank's theory, what is the periphery?

Areas which produce raw materials to sell to the core

#### 23. How has globalisation happened?

Trade

Spread of technology

Flows of investment into other countries

Outsourcing (using other countries to provide services because they are cheaper)

Culture (music, tv etc.)

#### 24. What are the different types of jobs?

Primary - collecting resources from the natural environment

Secondary- manufacturing products

Tertiary- providing a service

Quaternary- specialist research and development

#### 35. What is an emerging country?

One with high-medium human development and recent economic growth

#### 36. Why can't India trade northwards?

The Himalayas make it difficult

#### 37. What type of country is India?

An emerging country

#### 38. What does TNC stand for?

**Transnational Corporation** 

#### 39. What does FDI stand for?

Foreign Direct Investment

#### 40. What is outsourcing?

Where a company moves services overseas because labour is cheaper

#### 41. Why did BT locate in India?

High percentage of English speaking population

Cheaper labour

Reduced taxes

#### 42. What is rural-urban migration?

The movement of people from the countryside to the city

#### 43. What are the impacts of development in India?

Urban expansion (construction of new apartments)

Women marrying later due to developing their careers therefore birth and fertility rates fall Change in the population structure

#### 44. What is the multiplier effect?

The positive upward spiral of an effect

#### 45. What are the environmental impacts of India's growth?

Water pollution Air pollution Loss of biodiversity

#### 46. What are top down projects?

Development projects organised by the government on a large scale Narmada Dam Scheme is an example

#### 47. Why was the Narmada River Scheme introduced?

To store water so farmers can water their land Provide drinking water for Provide electricity cities and industries

#### 48. Who benefits from the Narmada River Scheme?

India's cities—provides 3.5 billion tonnes of water and hydroelectric power Farmers—will be able to water their crops

#### 49. Who loses because of the Narmada River Scheme?

Local residents— 234 villages have been flooded Local farmers— farmland has been flooded to create the dam Western India – religious and historic sites have been flooded

#### 50. What is bottom up development?

Small scale projects where experts work with small communities to identify their needs, offer assistance and allow people to control their lives.

#### 51. Whoruns bottom up development projects and name an examples

Non-governmental organisations (Charities), biogas development

#### 52. Describe the biogas development project in India.

Rural communities use cow dung to create gas called biogas which they then use cook with.

#### 53. What are the benefits of biogas development project in India?

Produces smoke free kitchens so less lung disease
Heat is instant so cooking is quicker
There's no ash so there is less cleaning
Girls do not need to collect wood so they aregoing to school
Electric generators provide light at night

### Topic 3 - Challenges of an Urbanising World (Q3 in the exam)

#### 1. What is meant by the term 'urbanisation'?

An increase in the proportion or percentage of people living in towns and cities.

#### 3. What is a megacity?

A city that has over 10 million residents, most of these are in the low income countries.

#### 4. What is a primate city?

A **primate city** is the largest city in its country or region, disproportionately larger than any others in the urban hierarchy.

#### 5. Why has urbanisation been so rapid in NIC's in the last 30 years?

Increase in the number of TNC's locating in urban areas so people from a lareas migrate towards the urban area. (Rural- urban migration)

Job opportunities and the prospect of a better life caused many people to move to the urban area

#### 6. What is a world city?

A global city that has influence over other places on a globabale, such as London or New York.

#### 7. What are the features of a world city?

Transport hubs that are large and busy (London Heathrow)

Finance and trade that has HQ to many International companies (Canary Wharf London)

Education – leading centres in Education (London Universities and nearby Oxford and Cambridge)

Governance and decision making- Key decision makers such as a President or Prime Minister are located in these areas such as Downing Street in London.

#### 9. What led to the population decline in Detroit?

Deindustrialisation

#### 10. What is counter urbanisation?

A process that took place where people living in cities move out.

#### 11. What is regeneration?

Redevelopment of former industrial areas or housing that improves them.

#### 12. What is a brownfeld site?

Land that was formerly used for industry that have been in use before

#### 13. What is the CBD and what land uses are found there?

Central Business District finance, administration and offices, retail and government building

#### 14. Name a mega city that you have studied in a developing country?

Mumbai, India.

#### 15. What is the population of Mumbai?

18.4million people.

#### 16. Describe the Geography of Mumbai?

Mumbai is located on the coast, it is an island

Near the River Ulah etsuary with a deep harbour

Mumbai has a series of interconnected areas that are accessible by rail and boat

#### 17. What is the structure of Mumbai?

Built around the harbour so CBD is at the island tip

industrial areas are near the port

wealthy suburbs are in the inner city areas close to the CBD

squatter settlements are on the outskirts far from the work in the centre

1000s of people live on the streets

#### 18. What are the two reasons why Mumbai has rown?

Pull factors towards the urban area and push factors from the rural area

Natural increase (decline in death rate and increase in birth rate)

#### 19. What are the pull factors that attracted people to Mumbai from rural India?

Poverty in rural areas andhe opportunity for a job in a TNC in Mumbai

Opportunities for education increasing in Mumbai

Males have moved to Mumbai in search of work and family members move to join them

#### 20. Why is Mumbai now a global city?

TNC's have located there and also Indian TNC has their HQ there

Mumbai International Airport is well connected for the East and West of the world

Biggest port in India and can ship all across the world

Bollywood film industry is located there

#### 21 What ishyper-urbanisation.

Mumbai's grows by 1000 people a day and by 3% each year. This super fast rate of urbanisation is called hyper urbanisation

#### 22. What is spatial growth?

The physical growth in size that a city takes up. For Mumbai from 68km 603km

#### 23. What is formal employment?

Employment that is regulated such as working in the banking industry or education where people pay tax

#### 24. What is the informal sector?

Jobs that people do that are not regulated such as selling items on the street orkishaw drivers

#### 25. Name two problems with the informal economy for families?

Families remain poor

Children have to help work with the family and are unable to afford school

Children have no education and cannot gain a job

These children then grow up into adults that have to work in the informal sector to be successful

#### 26. What are the issues with unpaid jobs?

No paid holidavs

No sickness pay

No rules to protect the health and safety of workers

#### 27. Why is Mumbai a city of two extremes?

Very rich successful businesses in contrast with 60% of people living in poverty and make shift housing (often on the side of railway tracks).

#### 28. What is a squatter settlement?

Informal housing that has been bilt from any materials that can be found and homes are built illegally on wasteland often near train tracks.

#### 29. What environmental problems has Mumbai's rapid expansion caused?

Water shortage, uncontrolled water pollution, waste/rubbish

#### 30. What does the word sustainability mean?

Meets the needs of the present without compromising the ability of future generations to meet their own needs. It should have economic, environmental and social benefits to be classed as sustainable

#### 31. What is an example of top down development in Mumbai?

Vision Mumbai

#### 32. What did Vision Mumbai set out to do?

build 1 million low-cost homes and reduce squatter settlements improve transport infrastructure improving air and water quality by reducing pollution 325 greenspaces 300 nextra public toilets widen and beautify main roads improve train capacity and safety

#### 33. What were the negatives of the changes in Dharavi?

people preferred slum improvements (piped water and sewage treatment) the new buildings split communities rent increased small workshops had to go forcing businesses to close

#### 34. What is an example of a bottomup development in Mumbai?

LSS (Lok Sev&angram) a health charity that is focused on leprosy

#### 35. What does LSS do in the community?

sets up clinics to detect the skin disease and help treat it educates people about the symptoms of leprosy and care for it community work includes exhibitions and group talks, helping to educate about sanitation and develops community groups and initiatives.