

You will sit the same Paper 1 again in September, to ensure you are prepared, complete the following:

1. Using the attached revision guide:

either

Create revision cards to answer each questions

or

Create mind maps to answer questions within each section

or

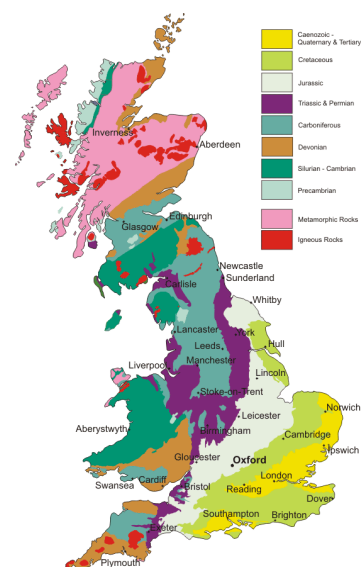
Make notes of the answers for each section in a revision notebook

2. Using the exam resources on the exam boards website practice answering questions in timed conditions (1 mark = 1 minute)

<https://qualifications.pearson.com/en/qualifications/edexcel-gcses/geography-a-2016.coursematerials.html#filterQuery=Pearson-UK:Category%2FSpecification-and-sample-assessments>

Paper 1 - UK Landscapes

- What are the characteristics and how do each of the 3 main rock types form?
 - sedimentary (chalk, sandstone, limestone)
 - igneous (basalt, granite),
 - metamorphic (schists, slates)
- Where in the UK you find the 3 main rock types
- Physical processes that shape landscapes:
 - How tectonic process help to form upland landscapes (igneous and metamorphic rocks)
 - Volcanic plugs (e.g. Edinburgh)
 - Tors (e.g. Dartmoor)
 - How tectonic activity shapes lowland landscapes (sedimentary rocks)
 - Crumpled/tilted rocks e.g. Lulworth
 - How moving and melting glaciers change and shape landscapes
 - U shaped valleys, deposited sediment
 - How weathering can change the shape of upland landscapes
 - scree slopes, jagged mountain tops
 - How mass movement can change the shape of landscapes
 - How human activity changes and shapes landscapes
 - How and why does agriculture change the landscape?
 - How and why does forestry change the landscape?
 - How and why have settlements changed the landscape?



Physical Processes

- Processes that change the coast/river:
 - What is weathering?
 - How does biological weathering work to break up material?
 - How does chemical weathering change rock?
 - How does mechanical (physical) weathering break up material?
 - What is mass movement?
 - What is slumping?
 - What is sliding?
 - What is soil creep?
 - What is erosion?
 - What is corrasion/abrasion?
 - What is attrition?
 - What is solution?
 - What is hydraulic action?
 - What is transportation?
 - What is traction?
 - What is saltation?
 - What is suspension?
 - What is solution?
 - How does longshore drift work?
 - What is deposition?
 - What causes deposition to happen?

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Paper 1 - Coastal Landscapes

- Factors influencing how the coastline changes
 - Geology
 - What is a discordant coastline?
 - What landforms do you get on it? Why?
 - What is a concordant coastline?
 - How does it erode? What landforms do you get on it?
 - What is the structure of a sedimentary rock?
 - How does the structure affect the way and speed it erodes?
 - Waves
 - What is fetch?
 - How does it affect the rate of erosion?
 - What are destructive waves like?
 - How do they shape the coast?
 - What are constructive waves like?
 - How do they shape the coast?
 - Climate
 - How do storms affect the rate of erosion?
 - How does the rate of erosion differ in the summer/winter?
 - How does the main wind direction (prevailing wind) affect the rate of erosion
- How does erosion create coastal landforms? (make sure you can link these to erosion and geology)
 - Headlands and bays
 - Wave-cut platforms and cliff retreat
 - Caves, arches, stacks and stumps
- How does deposition create coastal landforms?
 - Spits
 - Bars
 - Beaches
- How human activities have changed the coast
 - How urbanisation has changed the coast
 - How agriculture changes the coast
 - How industry has changed the coast
- How coastal recession impacts on people and the environment
- How coastal flooding impacts on people and the environment
- Managing the coast
 - The advantages and disadvantages of coastal defences
 - hard engineering:
 - sea walls
 - groynes
 - rip rap
 - Soft engineering
 - beach nourishment
 - offshore reefs

- How hard and soft engineering can change the coastal landscapes.

Paper 1 - River Landscapes

- How the river changes from source to mouth:
 - What the river valley is like in the
 - Upper course
 - Middle course
 - Lower course
 - How characteristics of the river change:
 - Width
 - Depth
 - Gradient
 - Discharge (make sure you know what it is)
 - Velocity
 - Sediment size
 - Sediment shape
- Factors influencing how the river changes
 - Geology
 - What is the structure of a sedimentary rock?
 - How does the structure affect the way and speed it erodes?
 - Climate
 - How do storms affect the rate of erosion?
 - How do droughts affect rivers?
 - How does the rate of erosion differ in the summer/winter?
- How does erosion create river landforms? (make sure you can link these to erosion and geology)
 - Interlocking spurs
 - Waterfalls
 - Gorges
 - River cliffs
- How does deposition create river landforms?
 - Flood plains; Levees; Point bar (slip off slope)
- How do deposition and erosion work together to create river landforms?
 - Meanders; Oxbow lakes
- How human activities and changes in land use affect rivers and river processes
 - How urbanisation affects rivers
 - How agriculture affects rivers
 - How industry affects rivers
- River flooding
 - The human causes of river flooding
 - The physical causes of river flooding
 - How river flooding impacts on people and the environment
 - The advantages and disadvantages of flood defences:
 - Hard engineering
 - Dams
 - Reservoirs
 - Channelization
 - Soft engineering
 - Flood plain zoning
 - Washlands
 - How defences can change river landscapes and processes

Paper 1 - Climate Change

- Atmospheric circulation (you need to be able to label a diagram of the cells)
 - What the cells are
 - How air is transferred within the cells
 - How low and high pressure are created (and where)
 - How atmospheric circulation redistributes heat
 - How ocean currents distribute heat
- How the climate has changed since the last ice age
 - How quaternary climates varied during
 - Glacial periods
 - Interglacial periods
 - How Milankovitch cycles work
 - Eccentricity
 - Earth's tilt
 - Precession (Wobble)
 - What solar variation is
 - Why volcanism affects climate
- How historic climates can be investigated:
 - Ice cores
 - Pollen records
 - Tree rings (dendrochronology)
 - Historical sources
- How human activity influences climate change through the production of greenhouse gases
 - What the enhanced greenhouse effect is
 - How industry creates greenhouse gases
 - How transport creates greenhouse gases
 - How energy production creates greenhouse gases
 - How farming creates greenhouse gases
 - Why there has been an increase in greenhouse gas production through farming, energy, transport and industry
- The negative effects of climate change on people and the environment:
 - How crop yields are changing
 - How, where and why rising sea levels are a problem
 - Why and where glaciers are retreating
- The UK climate
 - What the climate of the UK is like
 - How it differs from North – South & East to West
 - Why there are these differences in temperature, rain and wind
 - What relief rainfall is and where it occurs
 - Why the location of the UK affects the climate
 - Ocean currents (gulf stream)
 - Latitude
 - Being an island
 - Coastal fetch
 - How the UK climate has changed over the past 1000 years

Paper 1 - Weather Hazards

Tropical Cyclones

- How does atmospheric circulation (Hadley cells etc.) cause tropical cyclones? (hurricanes and typhoons)
- How do tropical cyclones form? (step by step)
- What are the characteristics of tropical cyclones?
- Where are tropical cyclones found? Why?
- When do tropical cyclones occur?
- How do tropical cyclones cause the natural hazards of: high winds, intense rainfall, storm surges, coastal flooding and landslides

- *HIC case study – Hurricane Sandy, USA (learn some facts and figures)*
 - What were the social, economic and environmental impacts?
 - Why did it have these impacts?
 - How have individuals, organisations and governments responded?
 - Why do they respond like this?
 - How good are their responses?

- *LIC case study – Hurricane Sandy, Cuba (learn some facts and figures)*
 - What were the social, economic and environmental impacts?
 - Why did it have these impacts?
 - How have individuals, organisations and governments responded?
 - Why do they respond like this?
 - How good are their responses?

Drought

- What are the characteristics of arid environments?
- What are the characteristics of drought?
- What are the causes of drought?
 - Meteorological, hydrological, and human
- How does atmospheric circulation make some places vulnerable to drought?
- Why are droughts hazardous?

- *HIC case study – California, USA (learn some facts and figures)*
 - What are the impacts of drought on people and the environment?
 - Why does it have these impacts?
 - How have individuals, organisations and governments responded?
 - Why do they respond like this?
 - How good are their responses?

- *LIC case study – Namibia (learn some facts and figures)*
 - What are the impacts of drought on people and the environment?
 - Why does it have these impacts?
 - How have individuals, organisations and governments responded?
 - Why do they respond like this?
 - How good are their responses?

Paper 1 - Ecosystems

- Where do you find the following large scale ecosystems? WHY are they there?
 - Tropical rainforest
 - Temperate forest & Boreal forest
 - Tropical grasslands & Temperate grasslands
 - Deserts
 - Tundra
- What are the characteristics of these ecosystems? (climate, vegetation, animals, soil)
- How does altitude affect ecosystems?
- What resources does the biosphere provide for people (food, medicine, building materials and fuel resources)?
- How are people exploiting the biosphere commercially for energy, water and mineral resources?
- Where in the UK do you find moorlands, heathlands, woodlands and wetlands?
 - What are each of these ecosystems like?
- Why are marine ecosystems important to the UK?
- How are UK marine ecosystems being damaged by human activities?

Tropical Rainforests

- What are the biotic and abiotic characteristics of the tropical rainforest? (Climate, soils, water, plants, animals and humans).
- What is the nutrient cycle of the tropical rainforest like?
 - Which is the biggest/smallest nutrient store?
 - Which is the biggest/smallest nutrient transfer?
- Why do tropical rainforests have a very high biodiversity?
- How have plants and animals adapted to the climate and environment of the tropical rainforest?
- What are the goods and services that tropical rainforests provide?
- How could climate change threaten the structure, functioning and biodiversity of tropical rainforests?
- What are the economic and social causes of deforestation?

Costa Rica case study:

How is the rainforest in **Costa Rica** being managed?

- What political and economic management techniques are they using?
- How good is the management? (Are the methods sustainable?)

Deciduous Woodlands

- What are the abiotic and biotic characteristics of the deciduous woodland?
- What is the nutrient cycle of the deciduous woodland like?
 - Which is the biggest/smallest nutrient store?
 - Which is the biggest/smallest nutrient transfer?
- Why do deciduous woodlands have moderate biodiversity?
- How have and animals adapted to deciduous woodlands?
- What goods and services are provided by deciduous woodlands
- How does climate change threaten the structure, function and biodiversity of the deciduous woodland?
- How have the following economic and social factors caused deforestation
 - Urbanisation, population growth, timber extraction, agricultural changes

Wyre Forest case study:

- How is the forest used?
- What are the problems there?
- How is the Wyre Forest being managed?
- How good is the management? (Are the methods sustainable?)