

GCSE Geography (OCR B) Pupil Learning Checklist (PLC)

Paper 1 – Our Natural World (Physical Geography)

GLOBAL HAZARDS UNIT:

Key Idea	Content	PLC			Revised?
		RED	AMBER	GREEN	
a. What processes occur at plate boundaries?	The structure of the Earth and how it is linked to the processes of plate tectonics including convection currents.				
	The processes that take place at constructive, destructive, conservative and collision plate boundaries as well as hotspots				
	How the movement of tectonic plates causes earthquakes, including shallow and deep focus, and volcanoes, including shield and composite				
b. How can tectonic movement be hazardous?	A case study of a tectonic event that has been hazardous for people, including specific causes, consequences of and responses to the event: The Haiti Earthquake 2010				
c. How does technology have the potential to save lives in hazard zones?	How technological developments can have a positive impact on mitigation (such as building design, prediction, early warning systems) in areas prone to a tectonic hazard of your choice.				
d. Why do we have weather extremes?	Outline of the global circulation system including the effects of high and low pressure belts in creating climatic zones.				
	How the global circulation of the atmosphere causes extremes in weather conditions in different parts of the world.				
	The extremes in weather conditions associated with wind, temperature and precipitation in contrasting countries.				
	The distribution and frequency of tropical storms and drought, and whether these have changed over time.				
	Outline the causes of the extreme weather conditions associated with tropical storms.				
	Outline the causes of the extreme weather conditions of El Niño/La Niña leading to drought.				
e. When does extreme weather become a hazard?	<p>Case studies of two contrasting natural weather hazard events arising from extreme weather conditions. The case studies must include a natural weather hazard from each bullet point below:</p> <ul style="list-style-type: none"> • flash flooding or tropical storms: Typhoon Haiyan 2013. • heat wave or drought. There must be one UK based and one non-UK based natural weather hazard event: UK Heatwave and Drought 2015 				

CHANGING CLIMATE UNIT

Key Idea	Content	PLC			Revised?
		RED	AMBER	GREEN	
a. What evidence is there for climate change?	The pattern of climate change from the beginning of the Quaternary period to the present day.				
	The range and reliability of evidence relating to climate change including evidence from sea ice positions, ice cores, global temperature data, paintings and diaries.				
b. Is climate change a natural process?	Outline the causes of natural climate change including the theories of sun spots, volcanic eruptions and Milankovitch cycles.				
	Investigate the natural greenhouse effect and the impacts that humans have on the atmosphere, including the enhanced greenhouse effect.				
c. Why is climate change a global issue?	Explore a range of social, economic and environmental impacts of climate change worldwide such as those resulting from sea level rise (Tuvalu case study) and extreme weather events. The impacts studied should relate to the 21st century.				
	Explore a range of social, economic and environmental impacts of climate change within the UK (case study) such as the impact on weather patterns, seasonal changes and changes in industry. The impacts studied should relate to the 21st century.				

DISTINCTIVE LANDSCAPES UNIT

Key Idea	Content	PLC			Revised?
		RED	AMBER	GREEN	
a. What is a landscape?	How the concept of a landscape can be defined, including the differences between built and natural landscapes.				
b. Where are the physical landscapes of the UK?	Overview of the distribution of upland, lowland and glaciated landscapes in the UK.				
	Overview of the characteristics of these landscapes which make them distinctive including their geology, climate and human acti				
c. What physical processes shape landscapes?	The geomorphic processes that are involved in shaping landscapes, including weathering (mechanical, chemical, biological), mass movement (sliding, slumping), erosion (abrasion, hydraulic action, attrition, solution), transport (traction, saltation, suspension, solution), deposition.				
	The formation of coastal landforms including headlands, bays , cave, arch, stack, beach and spit.				
	The formation of river landforms including waterfall, gorge, v-shaped valley, floodplain, levee, meander, ox-bow lake.				
d. What are the characteristics of your chosen landscapes?	<p>Case study of two landscapes in the UK, one coastal landscape (Walton on the Naze Case Study) and one river basin (River Tee's Case Study), to include the study of:</p> <ul style="list-style-type: none"> • its landforms created by geomorphic processes • the geomorphic processes operating at different scales and how they are influenced by geology and climate • how human activity, including management, works in combination with geomorphic processes to impact the landscape. 				

SUSTAINING ECOSYSTEMS UNIT

Key Idea	Content	PLC			Revised?
		RED	AMBER	GREEN	
a. What are ecosystems?	Understand the concept of an ecosystem as being the interdependence of climate, soil, water, plants and animals.				
	Outline the global distribution of polar regions, coral reefs, grasslands, temperate forests, tropical forests and hot deserts.				
	Overview of the climate, flora and fauna within these ecosystems.				
b. What biodiversity exists in tropical rainforests?	The distinctive characteristics of a tropical rainforest ecosystem, including the climate, nutrient cycle, soil profile and water cycle.				
	The interdependence of climate, soil, water, plants, animals and human activity in tropical rainforests.				
c. Why are tropical rainforests being 'exploited' and how can this be managed sustainably?	Explore the value of tropical rainforests through the study of their goods and services.				
	Human impacts in the tropical rainforest from activities such as logging, mineral extraction, agriculture and tourism.				
	A case study to illustrate attempts to sustainably manage an area of tropical rainforest, such as ecotourism, community programmes, biosphere reserves and sustainable forestry, at a local or regional scale: Costa Rica and the Sarnasati Nature Retreat/Reserve				
d. What is it like in Antarctica and the Arctic?	Outline the distinctive characteristics of Antarctica and the Arctic, including climate, features of the land and sea, flora and fauna.				
	The interdependence of climate, soil, water, plants, animals and human activity in either the Antarctic or the Arctic polar region.				
	Explore a range of impacts of human activity on either the Antarctic or the Arctic ecosystems, such as scientific research, indigenous people, tourism, fishing, whaling and mineral exploitation.				
e. How are humans seeking a sustainable solution for polar environments?	A case study to examine one small-scale example of sustainable management in either the Antarctic or the Arctic such as sustainable tourism, conservation and whaling: The Ice Hotel, Sweden.				
	A case study to examine one global example of sustainable management in either the Antarctic or the Arctic by investigating global actions such as Earth Summits or the Antarctic Treaty: The Arctic Council and the Paris Agreement				

Physical Fieldwork

The following areas of fieldwork will be assessed, through both learners' own experiences of fieldwork and unfamiliar contexts:

Key Idea	Content	PLC			<i>Revised?</i>
		RED	AMBER	GREEN	
<p>Walton on the Naze Fieldwork.</p> <p>Investigation title:</p> <p>What coastal processes are occurring at Walton and should they be managed?</p>	<p>Understanding of the kinds of question capable of being investigated through fieldwork and an understanding of the geographical enquiry processes appropriate to investigate these.</p> <p>Understanding of the range of techniques and methods used in fieldwork, including observation and different kinds of measurement.</p> <p>Processing and presenting fieldwork data in various ways including maps, graphs and diagrams.</p> <p>Analysing and explaining data collected in the field using knowledge of relevant geographical case studies and theories.</p> <p>Drawing evidenced conclusions and summaries from fieldwork transcripts and data.</p> <p>Reflecting critically on fieldwork data, methods used, conclusions drawn and knowledge gained.</p>				

Paper 2 – People and Society (Human Geography)

URBAN FUTURES UNIT

Key Idea	Content	PLC			Revised?
		RED	AMBER	GREEN	
a. How is the global pattern of urbanisation changing?	How urban growth rates vary in parts of the world with contrasting levels of development.				
	Outline characteristics of world cities and megacities and their changing distribution since 1950.				
b. What does rapid urbanisation mean for cities?	Understand the causes of rapid urbanisation in LIDCs, including the push and pull factors of rural-urban migration and internal growth.				
	Investigate the consequences of rapid urban growth in LIDCs: Kibera Slum Case Study				
	Understand the causes and consequences of contrasting urban trends in ACs, including suburbanisation, counter-urbanisation and re-urbanisation				
c. What is life like for people in a city?	<p style="text-align: center;">Case study of an AC city: Birmingham:</p> <ul style="list-style-type: none"> • The city’s location and importance within its region, the country, and the wider world. • Patterns of national and international migration and how this is changing the growth and character of the city. <ul style="list-style-type: none"> • Explore the ways of life in the city, such as culture, ethnicity, housing, leisure and consumption. • Investigate the contemporary challenges that affect life in the city, such as housing availability, transport provision, access to services and inequality. • Investigate the contemporary challenges that affect life in the city <p style="text-align: center;">Investigate one initiative to make the city more sustainable: The Library</p>				
	<p style="text-align: center;">Case study of an EDC city: Istanbul, Turkey:</p> <ul style="list-style-type: none"> • The city’s location and importance within its region, the country, and the wider world. • Patterns of national and international migration and how this is changing the growth and character of the city. <ul style="list-style-type: none"> • Explore the ways of life in the city, such as culture, ethnicity, housing, leisure and consumption. • Investigate the contemporary challenges that affect life in the city, such as housing availability, transport provision, access to services and inequality. • Investigate the contemporary challenges that affect life in the city <p style="text-align: center;">Investigate one initiative to make the city more sustainable: Transport system</p>				

DYNAMIC DEVELOPMENT UNIT

Key Idea	Content	PLC			Revised?
		RED	AMBER	GREEN	
a. What is development and how can it be measured?	Definition of ‘development’ and the ways in which countries can be classified, such as AC, EDC and LIDC.				
	Global distribution of ACs, EDCs and LIDCs.				
	Economic and social measures of development, such as GNI per capita and Human Development Index, and how they illustrate the consequences of uneven development.				
b. What has led to uneven development?	Outline the human and physical factors influencing global uneven development.				
	Explore the factors that make it hard for countries to break out of poverty, including debt, trade and political unrest.				
c. How has Zambia as an LIDC developed so far?	Overview of the economic development of an LIDC, including influences of population, society, technology and politics, particularly in the past 50 years, or post-independence: Zambia				
	Explore whether Rostow’s model can help determine the country’s path of economic development: Zambia				
	The extent to which the relevant Millennium Development Goals have been achieved for this LIDC: Zambia				
	Investigate how the LIDC’s wider political, social and environmental context has affected its development: Zambia				
d. What global connections influence Zambia’s development?	The country’s international trade, such as potential reliance on a single, or few, commodities and how this influences development: Zambia Copper				
	The benefits and problems of trade and Trans National Company (TNC) investment for development: Zambia				
	The advantages and disadvantages of international aid or debt relief for its development: Zambia and Water Aid				
c. What development strategy is most appropriate in Zambia ?	Compare the advantages and disadvantages of one top-down (Kariba Dam case study) and one bottom-up (Room to Read case study) strategy in Zambia .				

UK IN THE 21st CENTURY UNIT

Key Idea	Content	PLC			<i>Revised?</i>
		RED	AMBER	GREEN	
a. What does the UK look like in the 21st century?	Overview of human and physical geographical characteristics of the UK (case study) , including population density, land use, rainfall and relief, and significant issues associated with these characteristics, including water stress and housing shortages.				
b. How is the UK's population changing?	Overview of population trends in the UK since 2001, using population pyramids and migration statistics, to determine its position on the Demographic Transition Model.				
	An understanding of the causes, effects, spatial distribution and responses to an ageing population: UK Ageing population case study				
	A summary of the how the population structure and ethnic diversity of a named place of the UK has changed since 2001: London case study				
c. How is the UK's economy changing?	Identify major economic changes in the UK since 2001 by examining changes in the job market including political priorities, changing employment sectors and working hours.				
	Investigate the pattern of core UK economic hubs.				
	Identify the changes in one economic hub and its significance to its region and the UK: Cambridge case study				
d. What is the UK's political role in the world?	Examine the UK's political role in one global conflict through its participation in international organisations: Case study of the UK's involvement in Iraq and the Middle East				
e. How is the UK's cultural influence changing?	Explore the UK's media exports and their global influence including television programmes and film.				
	The contribution of ethnic groups to the cultural life of the UK through food: UK Food and the Chicken Tikka Masala				

RESOURCE RELIANCE UNIT

Key Idea	Content	PLC			Revised?
		RED	AMBER	GREEN	
a. How has increasing demand for resources affected our planet?	Outline the factors leading to demand outstripping supply of food, energy and water.				
	Overview of how environments and ecosystems are used and modified by humans including: <ul style="list-style-type: none"> • mechanisation of farming and commercial fishing to provide food • deforestation and mining to provide energy • reservoirs and water transfer schemes to provide water. 				
b. What does it mean to be food secure?	Understand the term ‘food security’ and the human and physical factors which influence this.				
	How world patterns of access to food are illustrated, such as the world hunger index and average daily calorie consumption.				
	Investigate the differences between Malthus and Boserup theories about the relationship between population and food supply.				
c. How can countries ensure their food security?	<p>Tanzania Case study of attempts to achieve food security to include:</p> <ul style="list-style-type: none"> • Investigation of statistics relating to food consumption and availability over time. • The success of one attempt in helping achieve food security at a local scale: Case study of Goat Aid in Tanzania • The effectiveness of one past and one present attempt to achieve food security at a national scale: Case Study 1: Present Project - Southern Agricultural Growth Corridor (SAGOT) of Tanzania. Case study 2: Past Project - Tanzania-Canada Wheat Project 				
d. How sustainable are these strategies?	Explore the environmental, economic and social sustainability of attempts to achieve food security, in relation to: <ul style="list-style-type: none"> • ethical consumerism, such as fairly traded goods and food waste • food production, such as organic methods and intensive farming • technological developments, such as GM crops and hydroponics • small scale ‘bottom up’ approaches, such as urban gardens and permaculture. 				

Human Fieldwork

The following areas of fieldwork will be assessed, through both learners' own experiences of fieldwork and unfamiliar contexts:

Key Idea	Content	PLC			<i>Revised?</i>
		RED	AMBER	GREEN	
<p>Cambridge Fieldwork.</p> <p>Investigation title:</p> <p>How do human interactions impact the environmental quality of Cambridge</p>	<p>Understanding of the kinds of question capable of being investigated through fieldwork and an understanding of the geographical enquiry processes appropriate to investigate these.</p> <p>Understanding of the range of techniques and methods used in fieldwork, including observation and different kinds of measurement.</p> <p>Processing and presenting fieldwork data in various ways including maps, graphs and diagrams.</p> <p>Analysing and explaining data collected in the field using knowledge of relevant geographical case studies and theories.</p> <p>Drawing evidenced conclusions and summaries from fieldwork transcripts and data.</p> <p>Reflecting critically on fieldwork data, methods used, conclusions drawn and knowledge gained.</p>				

Examination of Geographical Skills

You will also be examined on the following geographical skills across paper 1, 2 and 3 so ensure you have revised these. These were all taught within the units of study.

9. Geographical Skills

<p>9.1 With respect to cartographic skills, learners should be able to:</p> <ol style="list-style-type: none"> 1. Select and construct maps, using appropriate scales and annotations, to present information. 2. Interpret cross sections and transects. 3. Use and understand coordinates, scale and distance. 4. Extract, interpret, analyse and evaluate information. 5. Use and understand gradient, contour and spot height (on OS and other isoline maps). 6. Describe, interpret and analyse geo-spatial data presented in a GIS framework. 	<p>9.2 With respect to graphical skills, learners should be able to:</p> <ol style="list-style-type: none"> 1. Select and construct appropriate graphs and charts, using appropriate scales and annotations to present information. 2. Effectively present and communicate data through graphs and charts. 3. Extract, interpret, analyse and evaluate information.
<p>Maps to be studied:</p>	<p>Graphs and charts to be studied:</p>
<p>Atlas maps</p>	<p>Bar graphs (horizontal, vertical and divided)</p>
<p>OS maps (1:50 000 and 1:25 000 scales)</p>	<p>Histograms (with equal class interval)</p>
<p>Base maps</p>	<p>Line graphs</p>
<p>Choropleth maps</p>	<p>Scatter graphs (including best fit line)</p>
<p>Isoline maps</p>	<p>Dispersion graphs</p>
<p>Flow line maps</p>	<p>Pie charts</p>
<p>Desire-line maps</p>	<p>Climate graphs</p>
<p>Sphere of influence maps</p>	<p>Proportional symbols</p>
<p>Thematic maps</p>	<p>Pictograms</p>
<p>Route maps</p>	<p>Cross-sections</p>
<p>Sketch maps</p>	<p>Population pyramids</p>
	<p>Radial graphs</p>
	<p>Rose charts</p>

<p>9.3 With respect to numerical and statistical skills, learners should be able to:</p> <ol style="list-style-type: none"> 1. Demonstrate an understanding of number, area and scale. 2. Demonstrate an understanding of the quantitative relationships between units. 3. Understand and correctly use proportion, ratio, magnitude and frequency. 4. Understand and correctly use appropriate measures of central tendency, spread and cumulative frequency including, median, mean, range, quartiles and inter-quartile range, mode and modal class. 5. Calculate and understand percentages (increase and decrease) and percentiles. 6. Design fieldwork data collection sheets and collect data with an understanding of accuracy, sample size and procedures, control groups and reliability. 7. Interpret tables of data. 8. Describe relationships in bivariate data. 9. Sketch trend lines through scatter plots. 10. Draw estimated lines of best fit. 11. Make predictions; interpolate and extrapolate trends from data. 12. Be able to identify weaknesses in statistical presentations of data. 13. Draw and justify conclusions from numerical and statistical data.
<p>9.4 With respect to formulating enquiry and argument, learners should be able to:</p> <ol style="list-style-type: none"> 1. Deconstruct, interpret, analyse and evaluate visual images including photographs, cartoons, pictures and diagrams. 2. Analyse written articles from a variety of sources for understanding, interpretation and recognition of bias. 3. Suggest improvements to, issues with or reasons for using maps, graphs, statistical techniques and visual sources, such as photographs and diagrams.