BROADWATER SCHOOL
BY INCREMENTS CONQUER

Year 10 Geography RAGing

What is it?

This document is designed for you to identify what you know and what you don't. If there is lots of 'Red' that is fine! Just be honest with yourself. This will help me to identify how best to support you.

How to use:

Highlight each statement or topic in red, amber or green depending on how well you know it

Those areas that are red should be first priority

Those that are amber become second priority

Those that are green do not need to be revised

Next steps – support yourself:

Once you have RAGed, use the digital textbook to start going over what you have in the red column. It would be a good idea to use an app such as 'Anki App' to create yourself some flashcard revision notes.

You should also look at the glossary to identify key words and meanings. Used the 'Spaced repetition app' to help you.

Paper 1 Physical

Topic 1: The changing landscapes of the UK	R	A	G
There are geological variations within the UK a. Characteristics and distribution of the UK's main rock types: sedimentary (chalk, sandstone) igneous (basalt, granite), metamorphic (schists, slates). b. The role of geology and past tectonic processes in the development of upland (igneous and metamorphic rocks) and lowland (sedimentary rocks) landscapes.			
A number of physical and human processes work together to create distinct UK landscapes a. How distinctive upland and lowland landscapes result from the interaction of physical processes (glacial erosion and deposition, weathering and climatological, post-glacial river and slope processes). b. How distinctive landscapes result from human activity (agriculture, forestry, settlement) over time.			
A variety of physical processes interact to shape coastal landscapes a. The physical processes at work on the coast: weathering (mechanical, chemical, biological), mass movement (sliding and slumping), erosion (abrasion, hydraulic action, attrition and solution), transport (traction, saltation, suspension, solution and longshore drift) and deposition. b. Influence of geological structure (concordant/discordant, joints and faults), rock type (hard/soft rock) and wave action (destructive and constructive waves) on landforms c. How the UK's weather and climate (seasonality, storm frequency and prevailing winds) affect rates of coastal erosion and retreat, and impact on landforms and landscape.			
Coastal erosion and deposition create distinctive landforms within the coastal landscape a. The role of erosional processes in the development of landforms: headlands and bays, caves, arches, cliffs, stacks, wave cut platforms. b. The role of depositional processes in the development of landforms: bars, beaches and spits.			
Human activities can lead to changes in coastal landscapes which affect people and the environment a. How human activities (urbanisation, agriculture and industry) have affected landscapes and the effects of coastal recession and flooding on people and the environment. b. The advantages and disadvantages of different coastal defences used on the coastline of the UK (hard engineering, sea walls, groynes and rip rap and soft engineering, beach nourishment and managed retreat) and how they can lead to change in coastal landscapes.			
Distinctive coastal landscapes are the outcome of the interaction between physical and human processes a. The significance of the location of one named distinctive coastal landscape within the UK (discordant, concordant, coastline of deposition, coastal retreat) including how it has been formed and the most influential factors in its change.			
A variety of physical processes interact to shape river landscapes a. The physical processes at work in the river landscape: weathering (mechanical, chemical and biological), mass movement (sliding and slumping), erosion (abrasion, hydraulic action, attrition and solution), transport (traction, saltation, suspension and solution) and deposition.			

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b. How river landscapes contrast between the upper courses, mid courses and lower courses of rivers and why channel shape (width, depth), valley profile, gradient, discharge, velocity and sediment size and shape change along the course of a named UK river. b. How the UK's weather (short-term events such as storms and droughts) and climate affect river processes and impact on landforms and landscapes. Erosion and deposition interacting with geology create distinctive landforms in river landscapes a. The role of erosion processes and the influence of geology in the development of landforms: interlocking spurs, waterfalls, gorges and river cliffs. e role of depositional processes in the formation of flood plains, levees and point bars. c. The interaction of deposition and erosion processes in the development of landforms (meanders, oxbow lakes).			
Human activities can lead to changes in river landscapes which affect people and the environment a. How human activities and changes in land use (urbanisation, agriculture and industry) have affected river processes that impact on river landscapes; the physical and human causes and effects of river flooding. b. Advantages and disadvantages of different defences used on UK rivers (hard engineering— dams, reservoirs and channelisation and soft engineering— flood plain zoning and washlands) and how they can lead to change in river landscapes.			
Distinctive river landscapes are the outcome of the interaction between physical and human processes a. The significance of the location of one named distinctive UK river landscape (upland/lowland), how it has been formed and the most influential factors in its change.			

Topic 2: Weather hazards and climate change	R	A	G
The atmosphere operates as a global system transferring heat and energy a. The features of the global atmospheric circulation. b. How circulation cells and ocean currents transfer and redistribute heat energy across the Earth.			
The global climate was different in the past and continues to change due to natural causes a. How climate has changed in the past over different time scales: glacial and interglacial periods during the Quaternary period. b. Causes (Milankovitch cycles, solar variation, volcanism) and evidence (ice cores, pollen records, tree rings, historical sources) for natural climate change.			
Global climate is now changing as a result of human activity a. How human activities (industry, transport, energy, farming) produce greenhouse gases (carbon dioxide, methane) that cause the enhanced greenhouse effect. b. Negative effects that climate change is having on the environment and people (changing patterns of crop yield, rising sea levels and retreating glaciers).			
The UK has a distinct climate which has changed over time a. Climate of the UK today and changes over the last 1000 years. b. Spatial variations in temperature, prevailing wind and rainfall within the UK. c. The significance of the UK's geographic location in relation to its climate.			
Tropical cyclones are extreme weather events that develop under specific conditions and in certain locations a. How the global circulation of the atmosphere leads to tropical cyclones (hurricanes and typhoons) in source areas and the sequence of their formation. b. Characteristics, frequency and geographical distribution of tropical cyclones and how these change over time.			
There are various impacts of and responses to natural hazards caused by tropical cyclones depending on a country's level of development a. Reasons why tropical cyclones are natural weather hazards (high winds, intense rainfall, storm surges, coastal flooding and landslides). b. Different social, economic and environmental impacts that tropical cyclones can have on a named developed* and a named emerging* or developing* country . c. Different responses to tropical cyclones of individuals, organisations and governments in a named developed and a named emerging or developing country .			
The causes of drought are complex with some locations more vulnerable than others a. Characteristics of arid environments compared to the extreme weather conditions associated with drought. b. Different causes of the weather hazard of drought: meteorological, hydrological, and human (agricultural, dam building, deforestation). c. Why the global circulation makes some locations more vulnerable to drought as a natural hazard than others and how this changes over time.			
The impacts of, and responses to drought vary depending on a country's level of development a. Reasons why droughts are hazardous. b. How the impacts of drought on people and ecosystems can vary for a named developed and a named emerging or developing country . c. Different responses to drought from individuals, organisations and governments in a named developed and a named emerging or developing country .			

Topic 3: Ecosystems, biodiversity and management	R	A	G
Large-scale ecosystems are found in different parts of the world and are important a. Distributions and characteristics of the world's large-scale ecosystems (tropical, temperate and boreal forests, tropical and temperate grasslands, deserts and tundra). b. The role of climate and local factors (soils and altitude) in influencing the distribution of different large-scale ecosystems.			
The biosphere is a vital system a. How the biosphere provides resources for people (food, medicine, building materials and fuel resources) but is also increasingly exploited commercially for energy, water and mineral resources.			
The UK has its own variety of distinctive ecosystems that it relies on a. Distribution and characteristics of the UK's main terrestrial ecosystems (moorlands, heaths, woodlands, wetlands). b. Importance of marine ecosystems to the UK as a resource and how human activities are degrading them.			
Tropical rainforests show a range of distinguishing features a. Biotic and abiotic characteristics of the tropical rainforest ecosystem (climate, soils, water, plants, animals and humans). b. The interdependence of biotic and abiotic characteristics (climate, soils, water, plants, animals and humans) and the nutrient cycle (Gersmehl model). c. Why rainforests have very high biodiversity and how plants (stratified layers, buttress roots, drip tips) and animals (strong limbs, modified wings and beaks, camouflage) are adapted to that environment.			
Tropical rainforest ecosystems provide a range of goods and services some of which are under threat a. Examples of goods and services provided by tropical rainforest ecosystems (food stuffs, medicines, timber and recreation). b. How climate change presents a threat to the structure, functioning and biodiversity of tropical rainforests. c. Economic and social causes of deforestation (conversion to agriculture, resource extraction, population pressure). d. Political and economic factors (governance, commodity value and ecotourism) that have contributed to the sustainable management of a rainforest in a named region.			
Deciduous woodlands show a range of distinguishing features a. Abiotic and biotic characteristics of the deciduous woodland ecosystem (climate, soil, water, plants, animals and humans). b. The interdependence of biotic and abiotic characteristics (climate, soil, water, plants, animals and humans) and the nutrient cycle (Gersmehl model). c. Why deciduous woodlands have moderate biodiversity and how plants (leaf size and structure, water conservation in winter) and animals (migration, hibernation and food storage) are adapted to that environment.			
Deciduous woodlands ecosystems provide a range of goods and services some of which are under threat a. Examples of goods and services provided by deciduous woodlands ecosystems (timber, fuel, conservation and recreation). b. How climate change presents a threats to both the structure, function and biodiversity of the deciduous woodland ecosystem. c. Economic and social causes of deforestation (urbanisation and population growth, timber extraction and agricultural change). d. Different approaches to the sustainable use and management of deciduous woodlands in a named region.			

Topic 4: Changing cities	R	A	G
Urbanisation is a global process a. Contrasting trends in urbanisation over the last 50 years in different parts of the world (developed, emerging and developing countries). b. How and why urbanisation has occurred at different times and rates in different parts of the world (developed, emerging and developing countries) and the effects.			
The degree of urbanisation varies across the UK a. Distribution of urban population in the UK and the location of its major urban centres. b. Factors causing the rate and degree of urbanisation to differ between the regions of the UK.			
The context of the chosen UK city influences its functions and structure a. Site, situation and connectivity of the chosen UK city in a national (cultural and environmental), regional and global context. b. Chosen UK city's structure (Central Business District (CBD), inner city, suburbs, urban-rural fringe) in terms of its functions and building age.			
The chosen UK city is being changed by movements of people, employment and services a. The sequence of urbanisation, suburbanisation, counterurbanisation and re-urbanisation processes and their distinctive characteristics for the chosen UK city. b. Causes of national and international migration and the impact on different parts of the chosen UK city (age structure, ethnicity, housing, services).			
Globalisation and economic change create challenges for the chosen UK city that require long-term solutions a. Key population characteristics of the chosen UK city's that is available from the Census and reasons for population growth or decline. b. Causes of deindustrialisation (globalisation, de-centralisation, technological advances and developments in transport) and impacts on the chosen UK city. c. How economic change is increasing inequality in the city and the differences in quality of life. d. Recent changes in retailing and their impact on the chosen UK city: decline in the Central Business District (CBD), growth of edge- and out-of-town shopping and increasing popularity of internet shopping). e. The range of possible strategies aimed at making urban living more sustainable and improving quality of life (recycling, employment, education, health, transport, affordable and energy-efficient housing) for the chosen UK city.			
The context of the chosen developing country or emerging country city influences its functions and structure a. Site, situation and connectivity of the chosen city in a national (cultural and environmental), regional and global context. b. The chosen city's structure (Central Business District (CBD), inner city, suburbs, urban-rural fringe) in terms of its functions and building age.			
The character of the chosen developing country or emerging country city is influenced by its fast rate of growth a. Reasons for past and present trends in population growth (rates of natural increase, national and international migration, economic investment and growth). b. Causes of national and international migration and the impact on different parts of the chosen city (age structure, ethnicity, housing, services). c. How the growth of the chosen city is accompanied by increasing inequality (areas of extreme wealth versus poverty) and reasons for differences in quality of life.			
Rapid growth, within the chosen developing country or emerging country city, results in a number of challenges that need to be managed a. Effects resulting from the chosen city's rapid urbanisation: housing shortages, squatter settlements, under-employment employment, pollution and inadequate services. b. Advantages and disadvantages of both bottom-up and topdown approaches to solving the chosen city's problems and improving the quality of life or its people. c. The role of government policies in improving the quality of life (social, economic and environmental) within the chosen city.			

Topic 5: Global development	R	A	G
Definitions of development vary as do attempts to measure it a. Contrasting ways of defining development, using economic criteria and broader social and political measures. b. Different factors contribute to the human development of a country: economic, social, technological, cultural, as well as food and water security. c. How development is measured in different ways: Gross Domestic Product (GDP) per capita, the Human Development Index, measures of inequality and indices of political corruption.			
The level of development varies globally a. Global pattern of development and its unevenness between and within countries, including the UK. b. Factors (physical, historic and economic) that have led to spatial variations in the level of development globally and within the UK.			
Uneven global development has had a range of consequences a. Impact of uneven development on the quality of life in different parts of the world: access to housing, health, education, employment, technology, and food and water security.			
A range of strategies has been used to try to address uneven development a. The range of international strategies (international aid and inter-governmental agreements) that attempt to reduce uneven development. b. Difference between top-down (government or transnational corporation (TNC) led) and bottom-up development projects (community led). Their advantages and limitations in the promotion of development.			
The level of development of the chosen developing or emerging country is influenced by its location and context in the world a. Location and position of the chosen country in its region and globally. b. Broad political, social, cultural and environmental context of the chosen country in its region and globally. c. Unevenness of development within the chosen country (core and periphery) and reasons why development does not take place at the same rate across all regions.			
The interactions of economic, social and demographic processes influence the development of the chosen developing or emerging country a. Positive and negative impacts of changes that have occurred in the sectors (primary, secondary, tertiary and quaternary) of the chosen country's economy. b. Characteristics of international trade and aid and the chosen country's involvement in both. c. Changing balance between public investment (by government) and private investment (by TNCs and smaller businesses) for the chosen country. d. Changes in population structure and life expectancy that have occurred in the last 30 years in the chosen country. e. Changing social factors (increased inequality, growing middle class and improved education) in the chosen country.			
Changing geopolitics and technology impact on the chosen developing or emerging country a. How geopolitical relationships with other countries affect the chosen country's development: foreign policy, defence, military pacts, territorial disputes. b. How technology and connectivity support development in different parts of the chosen country and for different groups of people.			
There are positive and negative impacts of rapid development for the people and environment of the chosen developing or emerging country a. Positive and negative social, economic and environmental impacts of rapid development for the chosen country and its people. b. How the chosen country's government and people are managing the impacts of its rapid development to improve quality of life and its global status.			

Topic 6: Resource management	R	A	G
A natural resource is any feature or part of the environment that can be used to meet human needs a. Natural resources can be defined and classified in different ways (biotic, abiotic, renewable and non-renewable). b. Ways in which people exploit environments in order to obtain water, food and energy (extraction of fossil fuels, fishing, farming and deforestation). c. How environments are changed by this exploitation (reduced biodiversity, soil erosion and reduced water and air quality).			
The patterns of the distribution and consumption of natural resources varies on a global and a national scale a. Global and UK variety and distribution of natural resources (soil and agriculture, forestry, fossil fuels, water supply, rock and minerals). b. Global patterns of usage and consumption of food, energy and water.			
The supply of fresh water supply varies globally a. Global distribution of fresh water. b. How the availability of fresh water varies on a global, national and local scale. c. Why some parts of the world have a water surplus or a water deficit. d. How and why the supply and demand for water has changed in the past 50 years due to human intervention.			
There are differences between the water consumption patterns of developing countries and developed countries a. The proportion of water used by agriculture, industry and domestic in developed countries and emerging or developing countries. b. Why there are differences in water usage between developed countries and emerging or developing countries.			
Countries at different levels of development have water supply problems a. Why the UK has water supply problems (imbalances of the supply and demand for rainfall, seasonal imbalances and an ageing infrastructure: sewage and water pipes). b. Why emerging or developing countries have water supply problems (access to only untreated water, pollution of water courses and low annual rainfall).			
Meeting the demands for water resources could involve technology and interventions by different interest groups a. How attitudes to the exploitation and consumption of water resources vary with different stakeholders (individuals, organisations and governments). b. How technology (desalination) can resolve water resource shortages.			
Management and sustainable use of water resources are required at a range of spatial scales from local to international a. Why water resources require sustainable management. b. Different views held by individuals, organisations and governments on the management and sustainable use of water resources. c. How one developed country and one emerging or developing country have attempted to manage their water resources in a sustainable way.			

Paper 3 – Fieldwork and UK Challenges

Urban fieldwork	R	A	G
Understand how to formulate a question/hypothesis			
Understand quantitative and qualitative fieldwork methods in an urban area			
Understand what secondary sources could be used such as Office for National Statistics/Census			
Understand how to present data			
Be able to complete calculations of data			
Analyse findings to reach conclusions and evaluations			

Rivers fieldwork	R	A	G
Understand how to formulate a question/hypothesis			
Understand quantitative and qualitative fieldwork methods at a river			
Understand what secondary sources could be used such as Environment Agency flood risk maps			
Understand how to present data			
Be able to complete calculations of data			
Analyse findings to reach conclusions and evaluations			

Topic 8: Geographical investigations – UK challenges	R	A	G
The UK's resource consumption and environmental sustainability challenge a. Changes in the UK's population in the next 50 years and implications on resource consumption. b. Pressures of growing populations on the UK's ecosystems. c. Range of national sustainable transport options for the UK.			
The UK settlement, population and economic challenges a. The 'two-speed economy' and options for bridging the gap between south east and the rest of the UK. b. Costs and benefits of greenfield development and the regeneration of brownfield sites. c. UK net migration statistics and their reliability and values and attitudes of different stakeholders towards migration			
The UK's landscape challenges a. Approaches to conservation and development of UK National Parks b. Approaches to managing river and coastal UK flood risk.			
The UK's climate change challenges a. Uncertainties about how global climate change will impact on the UK's future climate. b. Impacts of climate change on people and landscapes in UK c. Range of responses to climate change in the UK at a local and national scale.			