The Appleton School

KS5 GEORAPHY

AQA

PAPER 1:
PHYSICAL GEOGRAPHY

PERSONAL LEARNING CHECKLISTS

2022

Geography – Paper 1: Physical Geography

RAG Rate each section in the first column

Red = Not at all confident – needs major revision focus, Amber = requires more revision until confident. Green = Confident.

Use remaining columns to colour code when you have revised and tested your knowledge and understanding over several weeks.

Key Idea	**Key Knowledge to understand**	**RAG**					
3.1.1 Water and Carbon Cycles							
3.1.1.1 Water and carbon cycles as natural systems	Systems in physical geography: systems concepts and their application to the water and carbon cycles – inputs, outputs, energy, stores/components, flows/transfers, positive/negative feedback, dynamic equilibrium						
3.1.1.3 The carbon cycle	Global distribution, and size of major stores of carbon – lithosphere, hydrosphere, cryosphere, biosphere, atmosphere.						
	Factors driving change in the magnitude of these stores over time and space, including flows and transfers at plant, sere and continental scales. Photosynthesis, respiration, decomposition, combustion, carbon sequestration in oceans and sediments, weathering.						
	The carbon budget and the impact of the carbon cycle upon land, ocean and atmosphere, including global climate.						
	Changes in the carbon cycle over time, to include natural variation (including wild fires, volcanic activity) and human impact (including hydrocarbon fuel extraction and burning, farming practices, deforestation, land use changes).						

	The carbon budget and the impact of the carbon cycle upon land, ocean and atmosphere, including global climate						
3.1.1.4 Water, carbon, climate and life on Earth	The key role of the carbon and water stores and cycles in supporting life on Earth with particular reference to climate.						
	The relationship between the water cycle and carbon cycle in the atmosphere.						
	The role of feedbacks within and between cycles and their link to climate change and implications for life on Earth.						
	Human interventions in the carbon cycle designed to influence carbon transfers and mitigate the impacts of climate change.						
3.1.3 Coastal systems and landscapes							
3.1.3.1 Coasts as natural systems	Systems in physical geography: systems concepts and their application to the development of coastal landscapes – inputs, outputs, energy, stores/components, flows/transfers, positive/negative feedback, dynamic equilibrium.						
	The concepts of landform and landscape and how related landforms combine to form characteristic landscapes.						
3.1.3.2 Systems and processes	Sources of energy in coastal environments: winds, waves (constructive and destructive), currents and tides.						
	Low energy coasts.						
	Sediment sources, cells and budgets.						
	Geomorphological processes: weathering, erosion, transportation and deposition.						

3.1.3.3 Coastal landscape development	Origin and development of landforms and landscapes of coastal deposition. Estuarine mudflat/saltmarsh environments and associated landscapes; factors and processes in their development.						
	Coastlines of emergence and submergence. Origin and development of associated landforms: fjords.						
	Recent and predicted climatic change and potential impact on coasts.						
3.1.3.4 Coastal management	Human intervention in coastal landscapes. Traditional approaches to coastal flood and erosion risk: hard and soft engineering.						
	Sustainable approaches to coastal flood risk and coastal erosion management: shoreline management/integrated coastal zone management.						
3.1.3.6 Case studies	Case study of a contrasting coastal landscape beyond the UK to illustrate and analyse how it presents risks and opportunities for human occupation and development and evaluate human responses of resilience, mitigation and adaptation.						
3.1.5 Hazards							
3.1.5.2 Plate tectonics	Destructive, constructive and conservative plate margins.						
	Characteristic processes: seismicity and vulcanicity.						
3.1.5.3 Volcanic hazards	The nature of vulcanicity and its relation to plate tectonics						
	forms of volcanic hazard: nuées ardentes, lava flows, mudflows, pyroclastic and ash fallout, gases/acid rain, tephra.						
	Spatial distribution, magnitude, frequency, regularity and predictability of hazard events.						

	Impacts: primary/secondary, environmental, social, economic, political.						
	Short- and long-term responses: risk management designed to reduce the impacts of the hazard through preparedness, mitigation, prevention and adaptation.						
	Impacts and human responses as evidenced by a recent volcanic event						
3.1.5.4 Seismic hazards	The nature of seismicity and its relation to plate tectonics: forms of seismic hazard: earthquakes, shockwaves, tsunamis, liquefaction, landslides.						
	Spatial distribution, randomness, magnitude, frequency, regularity, predictability of hazard events.						
	Impacts: primary/secondary; environmental, social, economic, political.						
	Short and long-term responses; risk management designed to reduce the impacts of the hazard through preparedness, mitigation, prevention and adaptation.						
	Short and long-term responses; risk management designed to reduce the impacts of the hazard through preparedness, mitigation, prevention and adaptation.						
3.1.5.5 Storm hazards	The nature of tropical storms and their underlying causes. Forms of storm hazard: high winds, storm surges, coastal flooding, river flooding and landslides.						
	Spatial distribution, magnitude, frequency, regularity, predictability of hazard events.						
	Impacts: primary/secondary, environmental, social, economic, political.						

	Short- and long-term responses: risk management designed to reduce the impacts of the hazard through preparedness, mitigation, prevention and adaptation.						
	Impacts and human responses as evidenced by two recent tropical storms in contrasting areas of the world.						
3.1.5.6 Fires in nature	Characteristic human responses to wildfires – fatalism, prediction, adjustment/adaptation, mitigation, management, risk sharing – and their relationship to hazard incidence, intensity, magnitude, distribution and level of development.						
	Nature of wildfires. Conditions favouring intense wildfires: vegetation type, fuel characteristics, climate and recent weather and fire behaviour.						
	Causes of fires: natural and human agency.						
	Short- and long-term responses; risk management designed to reduce the impacts of the hazard through preparedness, mitigation, prevention and adaptation.						
	Impact and human responses as evidenced by a recent wildfire event.						