

Physical Geography Exam: To Revise

The Living World

Topic	Tick
What is an ecosystem?	
What are biotic and abiotic components in an ecosystem?	
What is a producer?	
What is a consumer?	
What is a decomposer?	
What is a food chain	
What is a food web?	
What is nutrient cycling? (can you draw a diagram showing the cycle)	
How can an ecosystem be impacted by physical changes?	
How can an ecosystem be impacted by human changes?	
Can you describe the distribution of global ecosystems?	
Can you describe the characteristics of major global ecosystems?	
What are the physical characteristics of a tropical rainforest?	
What is biodiversity and why is the rainforest the most biodiverse ecosystem in the world?	
Why are soils, climate, water plants and animals independent to one another in a rainforest?	
How have plants adapted to conditions in the rainforest?	
How have animals adapted to conditions in the rainforest?	
How are rates of deforestation changing around the world?	
Case Study: Malaysia Rainforests: Causes of deforestation (palm oil, logging, road building, mineral extraction, energy development, settlement, population growth)	
Case Study: Malaysia Rainforests: Impacts of deforestation (economic development, soil erosion, biodiversity impact, contribution to climate change).	
Why are tropical rainforests valuable to people and the environment?	
How can rainforests be managed sustainably? (selective logging and replanting, conservation and education, ecotourism, international agreements for hardwood, debt reduction).	
What are the physical characteristics of a hot desert?	
Why is there interdependence between climate, water, soils, plants animals and people in the desert?	
How have plants adapted to the physical conditions of the hot desert?	
How have animals adapted to the physical conditions of the hot desert?	
Why is the desert not a very biodiverse ecosystem?	
Case Study Thar Desert in India/Pakistan: What are the opportunities for development? (mineral extraction, energy, farming, tourism)	
Case Study Thar Desert What are the challenges for development? (extreme temperatures, water supply, inaccessibility).	
What are the causes of desertification? (climate change, population growth, removal of fuel wood, overgrazing, over cultivation and soil erosion)	
How can desertification risk be reduced? (water and soil management, tree planting, magic stones, use of appropriate technology).	

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Physical Landscapes in the UK

Topic	Tick
Where are the UK's upland and lowland areas?	
Where are the UK's river systems?	
What causes a wave in the ocean to form?	
What are the characteristics of constructive waves?	
What are the characteristics of destructive waves?	
What is chemical weathering and what are the different types? (carbonation)	
What is mechanical weathering and what are the different types? (freeze thaw action,	
What is mass movement?	
What are the three common forms of mass movement? (slumping, sliding and rock fall)	
What are the four main processes of erosion? How do they breakdown rocks?	
How is sediment transported along the coast? (Longshore drift)	
What is deposition and why does it happen on the coast?	
How does geological structure and rock type influence the shape of the coast?(concordant/discordant coastlines)	
How are headlands and bays formed? (erosional landforms)	
How are cliffs and wave cut platforms formed? (erosional landforms)	
How are caves, arches and stacks formed? (erosional landforms)	
How are beaches formed? (depositional landform)	
How are sand dunes formed? (depositional landform)	
How are spits and bars formed? (depositional landforms)	
What landforms of erosion can be found along the Dorset coastline?	
What landforms of deposition can be found along the Dorset coastline?	
What is the difference between hard and soft engineering?	
What are the costs / benefits of sea walls, rock armour, gabions and groynes	
What are the costs / benefits of beach nourishment, beach profiling and dune management	
Coastal Management case study: Lyme Regis (reasons for the management, the strategy, the results of the management, the conflict caused by the management)	
How does a rivers long and cross profile change as you travel downstream?	
What is lateral and vertical erosion?	
What types of transportation occur in a river? (traction, saltation, suspension, solution)	
Why do rivers deposit sediment?	
How do landforms of erosion and deposition form in a river? (meanders /oxbow lakes)	
How do landforms of deposition form in a river? (levees, flood plains, estuaries)	
What landforms of erosion and deposition can be seen on the River Severn?	
What physical factors can lead to flooding?	
What human factors can lead to flooding?	
What is a flood hydrograph and what does it show?	
What are the costs and benefits of dams, reservoirs, straightening, embankments, flood relief channels? (Hard Engineering in a river)	
What are the costs and benefits of flood warnings, preparation, flood plain zoning, planting trees, river restoration (Soft Engineering)	
Case Study: Jubilee Flood Relief Channel (why was the scheme required, the strategy, and the social, environmental and economic issues with the scheme.	

Physical Geography Exam: To Revise

The Challenge of natural hazards

Topic	Tick
What is a natural hazard?	
What are the types of natural hazard? (tectonic, atmospheric, geomorphological, biological)	
What factors affect hazard risk? (population, frequency of event, magnitude, ability to cope)	
What causes plates to move? (convection currents, ridge push, slab pull)	
What is the difference between continental and oceanic plates?	
How are the earths earthquakes distributed?	
How are the earths volcanoes distributed?	
What happens at a constructive plate margin?	
What happens at a destructive plate margin?	
What happens at a conservative plate margin?	
Which types of plate margins cause earthquakes?	
Which types of plate margins cause volcanoes? (Shield at constructive / composite at destructive)	
What are the primary affects of earthquakes?	
What are the secondary affects of earthquakes?	
How can we respond in the short and long term to earthquakes?	
What were the effects and responses to the Nepal 2015 earthquake? (LIC Case Study)	
What were the effects and responses to the Chile 2010 earthquake? (HIC Case Study)	
Why do people still near areas tectonic hazard risk?	
How can monitoring reduce the risks of volcanoes and earthquakes?	
How can prediction help reduce the risks of volcanoes and earthquakes?	
How can protection help reduce the risks of volcanoes and earthquakes?	
How can planning help reduce the risks of volcanoes and earthquakes?	
What is the global atmospheric model and what does it show?	
What are pressure belts and surface winds?	
Where do tropical storms occur on a global basis? (typhoons, cyclones, hurricanes)	
How does the global atmospheric model relate to the formation of tropical storms?	
What causes a tropical storm to form?	
Can you explain sequence for the formation of a tropical storm?	
Can you identify the structure and features of a tropical storm?	
How may climate change affect the distribution, frequency and intensity of tropical storms?	
What are the primary and secondary impacts of tropical storms?	
What are the immediate and long term responses to tropical storms?	
What were the effects and responses to Typhoon Haiyan 2013? (Tropical Storm Case Study)	
How can monitoring, prediction, protection and planning reduce the impacts of tropical storms?	
What types of weather hazard can we experience in the UK?	
What were the causes of an extreme weather event in the UK? (Cockermouth Floods 2009)	
What were the social, environmental and economic impacts of an extreme weather event in the UK?	
How were the Cockermouth Floods 2009 managed?	
What records suggest the UK's weather is becoming more severe?	
What evidence is there that climate change is happening since the beginning of the Quaternary period? (melting glaciers, melting land ice, bird migrations)	
What natural factors cause climate change? (Orbital cycles, volcanic activity, solar flares, sunspots, wildfires)	
What human factors may cause climate change? (burning fossil fuels, rice farming, cattle ranches, deforestation)	
How may climate change impact people and the environment?	
How can we mitigate against climate change? (use renewable energy, carbon capture, plant trees, international agreements)	
How can we adapt to manage climate change? (change in farming practices, managing water supplies, flood management from rising sea levels).	