

# 50 Questions – the Physical Environment

No.	Question	Answer
1	What is a characteristic and example of igneous rock?	Basalt or granite, formed from molten rock, related to volcanoes, crystallization occurs
2	State one process which helps shape upland and lowland landscapes.	Glacial erosion and deposition, weathering and climatological processes
3	Identify two human activities which create distinctive landscapes over time.	Agriculture, forestry, settlement and mining
4	Name the five processes which shape the coastline?	Weathering, mass movement, erosion, transportation and deposition
5	Name and describe one example of mass movement.	Sliding/slumping/ soil creep - Slumping happens to weaker rocks and sliding happens commonly with soft boulder clay
6	What is a concordant and a discordant coastline.	Concordant is the same rock type, discordant alternates between hard and soft rock
7	Name three erosional landforms created on the coast.	Headlands, bays, cave, arch, stack, stump, wave cut platform.
8	Name three depositional landforms created on the coast.	Beach, bar, spit.
9	Give two examples of hard coastal defences and two examples of soft coastal defences.	Hard - Groynes, sea wall, rock armour, gabions, revetments Soft - Beach nourishment, managed retreat
10	Give two factors that cause an increased rate of erosion in the UK.	Seasonality, storm frequency, location and prevailing wind.
11	What are the four types of river transportation?	Traction, saltation, suspension and solution.
12	How does channel size change from the upper to lower course of a river?	Channel gets wider.
13	Name two erosional river landforms.	Interlocking spurs, waterfalls, gorges and river cliffs.
14	Name two river landforms where erosion and deposition work together in its formation.	Meanders and oxbow lakes.
15	Name two hard river defences and two soft river defences.	Hard - Dams, reservoirs and channelisation, embankments. Soft - Flood plain zoning and washlands.
16	How does sediment size change from the upper to lower course of a river	Sediment gets smaller due to erosion by attrition.
17	Define river velocity.	The speed at which a river runs through a channel
18	Name the four processes of river erosion	Abrasion, hydraulic action, solution, attrition
19	What is the quaternary period?	The last 2.6 million years
20	What are the three natural theories on climate change?	Milankovitch cycles, solar radiation and volcanism
21	State three ways in which you can gain evidence of past climate change.	Historical sources, ice cores, preserved pollen and tree ring dating
22	Name two sources of carbon dioxide.	Burning fossil fuels (industry, energy production, car exhausts)
23	Name two sources of methane.	Cows and rice fields
24	State a negative impact of climate change on the environment.	Melting ice sheets leading to rising sea levels and coastal flooding e.g. Maldives
25	State a negative impact of climate change on people.	Warmer drier climates could shorten the growing season and reduce crop yields e.g. Ethiopia
26	What is the perfect temperature for tropical cyclones to form?	27°C

27	What is the centre of a tropical cyclone called?	The eye
28	Name three hazards associated with tropical cyclones	High winds, storm surge, landslides, intense rainfall, coastal flooding
29	How is the strength of a tropical cyclone measure?	Saffir-simpson scale
30	How is heat energy moved from the tropics to the equator?	Ocean currents
31	What are the weather conditions like at the equator?	Hot and wet due to rising air forming rainfall, pressure is low.
32	What are the weather conditions like at the poles?	Cold and dry due to descending air, pressure is high.
33	Name five factors influencing the UK climate.	Ocean currents, latitude, distance from the sea, prevailing wind and altitude
34	What is a meteorological drought?	A period of time with below average precipitation
35	What is a hydrological drought?	Where the hydrological cycle receives less rainfall than normal so there is less groundwater and less water in reservoirs
36	How do humans cause drought?	Deforestation disrupting the hydrological cycle. Building dams so water flow downstream is disrupted. Over-abstraction of water for agriculture.
37	Name two drought hazards in a developed country e.g. California, USA.	Wildfires, subsidence and contamination of drinking water
38	Name two drought hazards in a developing country e.g. Ethiopia.	Reduction in crop yield, longer journeys to work to find water.
39	What is a biome?	A large scale ecosystem e.g. tropical rainforest
40	What is the name given to tangible things which can be used from an ecosystem e.g. timber, food and medicinal products?	Goods
41	What is the name given to intangible things which give people value from an ecosystem e.g. atmospheric regulation and tourism?	Services
42	Name the four UK terrestrial ecosystems.	Moorlands, heathlands, deciduous woodlands and wetlands
43	Name the three things which control the growing season in an ecosystem.	Temperature, rainfall and sunlight
44	Name the three stores of nutrients in an ecosystem.	Biomass, litter and soil.
45	Give two causes of deforestation in the Tropical rainforest.	Road building, clearance of land for agriculture, illegal logging and mining.
46	Define sustainable development.	Meeting the needs of the present without compromising the needs of future generations.
47	State two sustainable management techniques in the TRF.	Replanting trees, shifting cultivation, ecotourism, national parks (conservation areas)
48	State two ways in which trees are adapted to the TRF.	Drip tip leaves to avoid a built up of moisture and the growth of mould on the leaf, tall trees to catch sunlight, buttress roots to anchor the tree, shallow roots to take up nutrients.
49	Why do deciduous trees drop their leaves in autumn?	To reduce transpiration and save water in the cold winter months.
50	Give two causes of deforestation in the deciduous woodland.	Need for farmland, forestry, need for land for roads and settlements caused by population increase.