Paper 1 - Living with the physical environment

14	1A. The Challenge of Natural Hazards					After to			
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1.	What is a natural hazard?								
	a) What natural hazards are								
	b) Different types of natural hazards	-							
	c) Factors that affect hazard risk								
2.	Where are earthquakes and volcanoes located?								
	a) The Earth's structure								
	b) Why tectonic plates move								
	c) Location of earthquakes and volcanoes								
	d) The relationship between earthquakes, volcanoes and plate margins								
3.	What happens at the different types of plate margins?								
	a) How plates at constructive margins move	-							
	b) Why earthquakes and volcanoes are found at constructive								
	plate margins								
	c) How plates at destructive margins move								
	d) Why earthquakes and volcanoes are found at destructive								
	plate margins								
	e) How plates at conservative margins move								
	f) Why earthquakes are found at conservative plate margins								
4.	What were the effects of an earthquake on an HIC and an								
	LIC?								
	a) Primary and secondary effects of an HIC earthquake								
	b) How people responded to the HIC earthquake								
	c) Primary and secondary effects of an LIC earthquake								
	d) How people responded to the LIC earthquake								
5.	Why do effects and responses to earthquakes differ?								
	a) How the effects and responses compare								
	b) Why effects and responses are different								
6.	Why do people live in areas with tectonic hazards? How can								
	the risks be reduced?	-							
	a) Where people live in relation to earthquakes and volcanoes								
	b) Why people live in areas at risk of tectonic hazards								
	 c) How the risks of earthquakes or volcanic eruptions can be reduced 								

7.	What are the features of global atmospheric circulation?			
	a) The features of global atmospheric circulation			
	b) How global pressure and surface winds influence			
	precipitation			
g	What are tropical storms and where are they found?			
0.	a) Tropical storms and why they occur			
	b) Why tropical storms are distributed where they are			
	·			
	c) How tropical storms relate to global atmospheric circulation			
	d) How tropical storms form a) The structure and features of trapical storms			
	e) The structure and features of tropical storms			
9.	How might climate change affect tropical storms? How are			
	people being effected by and responding to tropical storms?			
	a) How climate change might affect tropical storms			
	b) The effects of a tropical storm			
	c) How tropical storms are measured			
	d) The immediate and long-term responses			
10.	What were the effects of a tropical storm on an LIC/HIC?			
	How are the effects of tropical storms reduced?			
	a) Primary and secondary effects of a tropical storm			
	b) The immediate and long-term responses			
	c) How tropical storms are monitored			
	d) How tropical storms are predicted			
	e) How people and property can be protected			
	f) How risks can be reduced through planning			
11.	What kind of extreme weather events affect the UK?			
	a) Extreme weather events affecting the UK			
	b) The causes of record rainfall and flooding			
	c) The social, economic and environmental impacts for people			
	and places			
12.	How do people response to the risk of extreme weather in the			
	UK?			
	a) How management strategies have reduced the risk of			
	extreme weather			
	b) Why local communities need to do more to protect			
	themselves			
13.	Is extreme weather on the rise in the UK?			
		1		

a) Rainfall record and changes in storm frequencyb) Temperature record and changes in drought frequency			
c) Future extreme weather predictions			
14. Climate change: myth or real?			
a) What the quaternary period is			
b) Changes in climate through time			
c) Evidence of climate change			
d) The possible natural causes of climate change			
15. Is climate change our fault? What are the effects of it?			
a) How the greenhouse effect works			
b) How human have contributed to climate change			
c) The likely effects of climate change			
d) How people and the environment may be affected by global			
climate change			
16. How can we mitigate and adapt against climate change?			
a) What mitigation is			
b) Reducing the causes of climate change			
c) The costs and benefits of methods of mitigation			
d) What adaptation is			
e) Managing climate change through adaptation			
f) The costs and benefits of methods of adaptation			

3.1.2 SECTION B: The Living World

Read through the table below and rate your understanding of each area.

ECOSYSTEMS AND TROPICAL		HE STA		AFTER THE AFTER RE					/ISION	
RAINFORESTS		••	<u></u>		••	(1)		••	<u></u>	
KEY IDEA: ecosystems exist at a rangabiotic components	ge of so	cales a	nd invo	lve the	interac	tion be	tween	biotic a	ınd	
Using an example describe the interrelationships present within a natural ecosystem										
Demonstrate an understanding of producers, consumers, decomposers, food chain, food web and nutrient cycling										
Understand that components within an ecosystem are balanced and explain the impact of changing one component										
Explain the distribution and characteristics of a large scale natural global ecosystem										
									=	
KEY IDEA: tropical rainforest ecosyst	ems ha	ave a ra	inge of	distinc	tive cha	aracteri	stics			
Describe the physical characteristics of a tropical rainforest										
Explain the links between climate, water, soils, plants, animals and people within the tropical rainforest										
Identify adaptations of plants and animals to the physical conditions within the tropical rainforest										
Explain the adaptations of plants and animals to the physical conditions within the tropical rainforest										
Describe the issues related to biodiversity										
Evaluate the issues related to biodiversity										
KEY IDEA: deforestation has econom	ic and	enviror	menta	impac	ts					
Describe the changing rates of deforestation										

ECOSYSTEMS AND TROPICAL	AT THE START OF THE TOPIC			AFTER THE TOPIC			AFTER REVISION		
RAINFORESTS		•••	(1)		•••	=)	(:0		
Using a case study explain the various causes of deforestation									
Using a case study explain the various impacts of deforestation									
KEY IDEA: tropical rainforests need t	o be m	anaged	to be s	sustain	able				
Explain the values of the tropical rainforests to people and the environment									
Describe the various strategies used to manage the tropical rainforest sustainably									
Evaluate the various strategies used to manage the tropical rainforest sustainably									

1.2.3 SECTION B: The Living World

Read through the table below and rate your understanding of each area.

HOT DESERTS		IE STAI HE TOP		AFTER THE TOPIC			AFTER REVISION			
		0 0			0 0			••		
KEY IDEA: Hot desert ecosystems h	ave a r	ange of	distind	ctive ch	naracte	ristics				
Know the physical characteristics of a hot desert										
Understand the interdependence of climate, water, soils, plants animals and people.										
Can describe how plants and animals adapt to the physical conditions.										
Explain and evaluate issues related to biodiversity in hot deserts.										
KEY IDEA: Development of hot dese	rt envir	onmen	ts crea	tes opp	ortunit	ies and	l challe	nges		
Using a case study, describe and explain development opportunities: mineral extraction, energy, farming and tourism.										
Using a case study, describe and explain the challenges of developing hot desert environments: extreme temperatures, water supply and inaccessibility.										
KEY IDEA: Areas on the fringe of hor	t desert	ts are a	t risk o	f deser	tificatio	n				
Know and understand the causes of desertification – climate change, population growth, removal of fuel wood, overgrazing, over-cultivation and soil erosion.										
Evaluate the strategies used to reduce the risk of desertification – water and soil management, tree planting and use of appropriate technology.										

3.1.3 SECTION C: Physical Landscapes in the UK

Read through the table below and rate your understanding of each area.

COASTAL LANDSCAPES IN		HE STAI		AFTER THE AFTER R TOPIC				ER REV	REVISION	
THE UK		••	(1)		(1)	(=))		••	(1)	
KEY IDEA: the coast is shaped by a n	umber	of phy	sical pr	ocesse	s					
Describe the different types of waves and their characteristics										
Explain the difference between the different weathering processes (mechanical and chemical)										
Explain how mass movements occur and describe the different types of mass movement (sliding, slumping, falls)										
Explain the different types of erosion (hydraulic action , abrasion, attrition)										
Explain how material is transported by longshore drift										
Explain why sediment is deposited in coastal areas										
									$\overline{}$	
KEY IDEA: distinctive coastal landford processes	ms are	the res	ult of ro	ck type	e, struct	ture and	d phys	ical		
Explain how geological structure and rock type influence coastal forms										
Identify the different coastal landforms which result from erosional processes and describe their characteristics										
Explain how erosion landforms are formed (headlands, bays, cliffs, wave cut platforms, caves, arches, stacks)										
Identify the different coastal landforms which result from depositional processes and describe their characteristics										
Explain how deposition landforms are formed (beaches, sand dunes, spits, bars)										
Using an example of a section of coastline in the UK identify the major landforms of erosion and deposition										

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COASTAL AT THE START OF AFTER THE AFTER REVISION THE TOPIC TOPIC LANDSCAPES IN 4 4 ••• Ш •• •• THE UK KEY IDEA: different management strategies used to protect coastlines from the effects of physical processes Identify the different coastal management strategies Describe the differences between hard and soft engineering Evaluate the costs and benefits of hard engineering methods Evaluate the costs and benefits of soft engineering methods Evaluate the costs and benefits of managed retreat Using an example of a coastal management strategy in the UK to explain the reasons for management Using an example of a coastal management strategy in the UK to explain the strategy adopted Using an example of a coastal

management strategy in the UK to evaluate the resulting conflicts and effects

RIVER LANDSCAPES IN		IE STAI HE TOP		AF	TER T		AFTE	ISION		
THE UK	(:0	•				(1)	(:0	•••		
KEY IDEA: the shape of river valleys changes as rivers flow downstream										
Describe the characteristics of a long profile and changing cross profiles of a river and its valley										
Explain the difference between the different erosion processes (hydraulic action, abrasion, attrition, solution)										
Explain the differences between the different transportation processes (traction saltation, suspension, solution)										
Explain why rivers deposit sediment										
KEY IDEA: distinctive fluvial landform	ns resu	It from	differe	nt phys	ical pro	cesses	5			
Identify the different landforms which result from erosional processes and describe their characteristics										
Explain how erosion landforms are formed (interlocking spurs, waterfalls, gorges)										
Identify the different landforms which result from erosion and deposition processes and describe their characteristics										
Explain how erosion and deposition landforms are formed (meanders and oxbow lakes)										
Identify the different landforms which result from depositional processes and describe their characteristics										
Explain how deposition landforms are formed (levees, flood plains, estuaries)										
Using an example of a river valley in the UK identify the major landforms of erosion and deposition										
KEY IDEA: different management stra	itegies	used to	protec	ct river	landsc	apes fr	om the	effects	of	

RIVER LANDSCAPES IN	IE STAI HE TOP	AFTER THE TOPIC			AFTER REVISION			
THE UK	•••			=)		•••		
Explain how physical and human factors affect the flood risk (precipitation, geology, relief and land use)								
Analyse hydrographs to explain the relationship between precipitation and discharge								
Identify the different flood management strategies								
Describe the differences between hard and soft engineering								
Evaluate the costs and benefits of hard engineering methods								
Evaluate the costs and benefits of soft engineering methods								
Evaluate the costs and benefits of managed retreat								
Evaluate the costs and benefits of managed retreat								
Using an example of a flood management strategy in the UK to explain why the scheme was required								
Using an example of a flood management strategy in the UK to explain the strategy adopted								
Using an example of a flood management strategy in the UK to evaluate the economic, social and environmental issues								