

Year 11 Trial Exams 1 Geography Revision Paper 1

The Challenge of Natural Hazards



PiXL Independence: Ranking Triangle

Case Studies of Earthquakes – LIC and HIC

Rank the responses to one earthquake you have studied. Identify your case study.

Justify your choices.

The most important information goes at the top and then the least important at the bottom. Make sure you justify WHY you think it the most/least important.



PiXL Independence: Thinking Hard Model Tropical Storm Formation

The tropics have some of the fiercest and most destructive storms on Earth. The hurricanes that occur in that region claim an average of 20,000 lives each year and cause immense damage to property, vegetation and shipping.

- 1. Tropical storms develop when the sea temperature is 27°c or higher and when the wind shear (the difference in wind speed) between the higher and the lower parts is low. Seawater is 60 metres deep or more.
- 2. Warm, moist air rises and condensation occurs. This releases huge amounts of energy, which makes the storms powerful. The rising air creates an area of low pressure, which increases surface winds. A strong upward movement of air draws water vapour up from the warm ocean surface. The evaporated air cools as it rises and condenses to form towering thunderstorm clouds.
- 3. Most tropical storms form at 5-15 degrees north and south of the equator. Tropical storms move towards the west because of the easterly winds near the equator.
- 4. The Earth's rotation (Coriolis effect) deflects the paths of the winds, which causes the storms to spin. In the northern hemisphere the rotation is anti-clockwise.
- 5. The storm gets stronger due to energy from the warm water, so wind speeds increase. As the air condenses it releases heat which powers the storm and draws up more and more water from the ocean.
- 6. Several smaller thunderstorms join together to form a giant spinning storm. When the surface winds reach an average of 120km per hour (75 miles per hour) the storm officially becomes a tropical storm.
- 7. They lose strength when they move over land or cooler water because the energy supply from the warm water is cut off.
- 8. Most tropical storms form at low latitudes between 5 ° and 30° North and South but they do not occur at the equator any further from the equator and the water just isn't warm enough. The majority of storms occur in the Northern Hemisphere (especially over the Pacific), in late summer and autumn, when the sea temperatures are at their highest.



4	PiXL Independence: Thinking Hard Model <u>Tropical Storm Formation</u>	
G	Take the text and do the following:	
1)	rioritise: Underline the three most important sentences and write them here. Rank 1-3, briefly explain number 1. Cros ut the least important sentence	S
2)		
2)	educe: Reduce the key information into 12 words	
3)	ransform: Transform this information into 4 pictures or images (no words allowed)	
4)	ategorise: Sort this information into three categories. Highlight and think of a suitable title for each category.	
5)	xtend: Write down three questions you'd like to ask an expert in this subject.	



PiXL Independence: 'Boxing Up' Activity

Reducing the Risk from Tectonic Hazards

x 1 – 3 things I did not know	
x 2 – 3 things I understand better now	
x 3 – 3 things I already knew	
x 4 2 things I need to research further	
x 4 – 5 things theed to research further	



PiXL Independence: Question Time

What happens at plate margins?

When you read any text, you should be asking it questions NOT just letting it wash over you. Read your text and pause and ask it questions e.g. 'what do you mean when you say '...."?'





Inc	PiXL Independence: Quizzing <u>Typhoon Haiyan</u>		
5	Read the text and come up with 20 ques	tions to ask someone about the text.	
	Swap with a partner and a	nswer their questions.	
_	Mark the a	nswers.	
	Question	Answer	
1			
2			
3			
4			
5			
6			
7			
8			
9			
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11			
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20	

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PiXL Independence: Transforming

Extreme Weather in the UK

Turn the material you have read into up to 6 pictures – one per paragraph or one per key piece of information. The pictures must represent the information so that they can act as a reminder of what the text said. Underneath each picture, explain your thinking.

1.	2.	3.

4.	5.	6.





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