

destructive convergent plate boundary

Case Study Name: <u>Montserrat eruption 1996</u>		Key Terms: longest volcanic sequence of eruptions in modern history	
Section of the Specification: <u>The natural environment (2.1)</u>			
Location: Solum SW of Antigua	Town/City/Region: <u>Barbados, Antigua, Caribbean</u> <u>Soufriere Hills, America</u>	Country: <u>Barbados</u>	Continent: <u>America</u>
Key Information:		Causes/Theory:	
What? Montserrat erupted ash clouds, columns Capital City Plymouth had to be evacuated pyroclastic flows hot rock pressing out	When? <u>JULY 1995 → 1998</u> - eruption on mothersday	The South American and North American plates plunged beneath the Caribbean plate, causing pressure to build up on this destructive plate boundary, where Montserrat stands. The pressure built up in the volcanic chamber, forcing out magma flows, rock and ash in a series of explosions and pyroclastic flows	
Why? South American & North American tectonic plates moving, putting pressure on gas inside the volcanic chamber, pressing out rock & steam/ash	Facts and Figures: - 400 years she lay sleeping (dormant) - 6000 people fled - 6 weeks to erupt - population decreased from 11000 → 4500 → 9000		
Effects:		Solutions:	
Political: All government offices were located in Plymouth, had to be abandoned	Economic: - south, agricultural area was evacuated, so no farming profits - profitable public areas abandoned (cinemas, shops, etc) no profits - number of tourists fell	What has/could be done? By whom? - new schools and public services built - upgraded roads - many jobs available	Are they Sustainable? Why/Why not?
Environmental: - ash clouds block out sunlight and cover plants/ small animals - pyroclastic flows kill all life - contaminated water	Social: - all people had to be evacuated - up to 50 people had to share 1 toilet (evacuated) - bad hygiene levels in evacuation camps - contaminated water / illnesses - population fell from 11000 → 4500	- there are plans to build new medical schools and hazard studies school	
Possible Exam Question:			