YEAR 9 GEOGRAPHY – CYCLE 2 – NATURAL HAZARDS AND TECTONIC THEORY

Instruct event (e.g. earthquake, volcanic eruption, tropical storm) which has potential to cause damage, distruction, death Low viscosity very thin, runny lava 2 less volcent eruptions 2 e.g. shield volcances and those to entry the earthquake facus earthquake a sudden violent movement within the Earth's crust epicenter point on the Earth's surface 2 directly above the earthquake facus weather hazards e.g. tropical storms (lumricanes, cyclones, typhons), drought, flood sistemic wave waxes of energy that travel through the Earth's surface 2 directly above the earthquake facus hazard ink the probability or chance that a natural hazard may occur sistemic wave waxes of energy that travel through the Earth's serves molter hot, liquid and meted e.g. lawa Box 8 tecronic Ac > flowing ouder the ground Box 8 tecronic Ac > flowing ouder the ground base to molter mock > flowing ouder the ground BOX 2 FACCIDS AFECTIVIGE HAZARD BISK population density high population density > more popie affected volcano formation site two plates move away from each other > magen rises to fill the gap > forms volcano BOX 3 LAVERS OF CRUST Single a performation work > development > weak plate give social (thin), continental (thick) Volcanic Explosivity Index volcano chample Volcanic Explosivity Index Volcanic Explosivity Index Volcanic Explosivity Index Volcanic Explosivity I	natural hazard natural event (e.g. earthquake, volcanic eruption, tropical storm) which has potential to cause damage, destruction, death low viscosity very thin, runny lava \rightarrow less violent eruptions \rightarrow e.g. sh earthquake focus earthquake a sudden violent movement within the Earth's crust earthquake focus point under the ground \rightarrow where an earthquake starts tectonic hazards caused by movement of tectonic plates (e.g. volcances and earthquakes) Richter Scale used to decide the magnitude (power/strength) of earth	eld volcanoes uake focus Juakes earthquakes
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Coccanic Crust Chini (5-10 km) ≠ more dense ≠ e.g. basait ≠ young (200 miniton years) earthquakes pressure and friction builds between the plates (as the oceanic plate is subducted) > eventually plates slip suddenly to new position > sudden movement causes vibrations (seismic waves) > felt as earthquake BOX 5: TECTONIC PLATE MARGINS earthquakes pressure and friction builds between the plates (as the oceanic plate is subducted) > eventually plates slip suddenly to new position > sudden movement causes vibrations (seismic waves) > felt as earthquake plate margins where plates move towards each other → rising magma fills the gap volcano formation oceanic plate subducted underneath continental plate → immense heat and pressure → oceanic plate melts as it sinks and turns into magma → magma rises to surface through cracks in continental plate → forms volcano on the surface conservative margin two tectonic plates slide past each other volcano type composite volcanoes → high, YEI → extremely violent eruptions → thick lava (high viscosity) → lava explodes into clouds of thick ash ridge push molten magma rises in the gap between the plates at constructive plate margins → cools to form new land → land pushes the plates further apart bX 10: TECTONIC ACTIVITY → AT CONSERVATIVE PLATE MARGINS slab pull oceanic crust subducted at destructive plate margins → gravity causes plate to sink → pulls the rest of plate along → causes entire plate to move BOX 10: TECTONIC ACTIVITY → AT CONSERVATIVE PLATE MARGINS VEI Volcanic Explosivity Index → shows magnitude (strengt	continental crust thick (20-200 km) - less dense - e.g. granite - old (3.8 billion years) underneath) under the continental crust	
BOX.5: TECTONIC PLATE MARGINS subducted ly composition → sudden tectonic plate section/segment of crust movement causes vibrations (seismic waves) → felt as earthquake plate margins where plates meet (plate boundary) volcano formation constructive margin two plates move away from each other → rising magna fills the gap volcano formation destructive margin two plates move towards each other → oceanic crust is subducted (sinks underneath) under the continental crust volcano type conservative margin two tectonic plate slide past each other volcano type conservative margin two tectonic plates slide past each other volcano type convection convection currents → magna heated by core → rises → moves plates Volcanic Explosivity ridge push molten magma rises in the gap between the plates at constructive plate margins → cools to form new land → land pushes the plates further apart Volcanic Explosivity slab pull oceanic crust subducted at destructive plate anorg > causes entire plate to move BOX 10: TECTONIC ACTIVITY → AT CONSERVATIVE PLATE MARGINS plate to sink → pulls the rest of plate along → causes entire plate to move plate movement two tectonic plates slip suddenly to a new position → sudden movement slab pull Oceanic Explosivity Index → shows magnitude (strength) 1=low, 8=high pr	oceanic crust thin (5-10 km) 7 more dense 7 e.g. basait 7 young (200 million years) earthquakes earthquakes earthquakes	oceanic plate is
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shield volcances → flat like a shield → occur at constructive margins volcances no volcance activity at conservative plate margins (no rising magma)	shield volcanoes \rightarrow flat like a shield \rightarrow occur at constructive margins volcanoes no volcanic activity at conservative plate margins (no ris	ig magma)

Exam Paper 1 (Living with the Physical Environment) Section A (The Challenge of Natural Hazards) Topic (Natural Hazards and Tectonic Theory)

YEAR 9 GEOGRAPHY – CYCLE 2 – NATURAL HAZARDS AND TECTONIC THEORY