Lesson	Learning Objectives - The pupils should learn:	Differentiation linked to assessment grid	Suggested teaching and learning activities	Possible Resources
1.	**What is a natural hazard?** ▪ Definition of a natural hazard. ▪ Types of natural hazard. ▪ Factors affecting hazard risk.	People and the environment, Geographical key words, Impact, Theory (G1-7)	Concept mapping activity using pictures, newspaper headlines, maps and graphs to cover a range of natural hazards. Students identify, sort, categorise and link to discover what the connection is. Students write up activity, possibly including some of the images as cut and stick.	Various textbooks, e.g. AQA GCSE, Progress in Geography KS3 Youtube clips Photographs BFCJ Work booklet (see PL)
2.	**What is plate tectonic theory?** ▪ Explain plate tectonics theory. ▪ Describe global distribution of earthquakes and volcanic eruptions and their relationship to plate margins.	Theory, Processes, Maps, Using sources (G1-7)	Introduce the movement of continental plates with the film of 'Scrat's Continental Crack Up' on YouTube. GIS-mapping activity using USGS website to plot active volcanoes and earthquakes on a world map (plate margins marked on optional). Describe and explain the distribution. Draw out theory and the reasons for this, linking to the YouTube clip.	Various textbooks, e.g. AQA GCSE, Progress in Geography KS3 Youtube clips Photographs Plate boundary maps BFCJ Work booklet (see PL)
3.	**What happens at different plate boundaries?** ***1 of 2 lessons*** ▪ Describe and explain the physical processes taking place at different types of plate margins (constructive, destructive and conservative) that lead to earthquakes and volcanic activity.	Theory, Processes, Maps, People and the environment, Geographical key words, Using sources, (G1-7)	Teacher taught using animations, such as "Kung Fu Panda Plate Tectonics" on YouTube Students to make well-annotated diagrams.	Various textbooks, e.g. AQA GCSE, Progress in Geography KS3 Youtube clips BFCJ Work booklet (see PL)
4.	**What happens at different plate boundaries?** ***2 of 2 lessons*** ▪ Describe and explain the physical processes taking place at different types of plate margins (constructive, destructive and conservative) that lead to earthquakes and volcanic activity.	Theory, Processes, Maps, People and the environment, Geographical key words, Using sources, (G1-7)	Create models to represent the different plate boundaries, using cardboard, PlayDoh or bread and jam to show the movement of plates. Return to map to mark on the directional movement of the plates and name examples of each margin across the world.	Various textbooks, e.g. AQA GCSE, Progress in Geography KS3 Youtube clips BFCJ Work booklet (see PL)

5.	**What different types of tectonic hazard are there?** ▪ Describe what a volcano is; differentiate between different types, e.g. shield and composite. ▪ Explain how earthquakes are caused, measured and monitored.	Describing places, Processes, Impact, People and the environment (G1-7)	Teacher taught using animations and video clips, e.g. Volcanoes 101 (National Geographic). Students to make well-annotated diagrams, could get them to sort characteristics and features of bothe shield and composite volcanoes to assess understanding. Students to make well-annotated diagram of earthquake zone, labelling key features, e.g. focus, epicentre, seismic waves. Use 'Stick/Strain/Shift' to help them remember the processes causing the release of seismic energy.	Various textbooks, e.g. AQA GCSE, Progress in Geography KS3 Youtube clips BFCJ Work booklet (see PL)
6.	**What factors cause a high rate of fatalities when an earthquake strikes?** ▪ Investigate how severe earthquakes are using numerical and graphical skills. ▪ To calculate mean, median, and mode. ▪ To draw, and interpret, a scattergraph.	Statistics, Graphs, Hypotheses, Patterns Conclusions (G1-7)	Ask the question - What things can cause a high rate of fatalities when an earthquake strikes? Ask about the relationship between magnitude and death toll. What do they expect? Give data (see PL for PowerPoint) – get them to calculate mean, median, and mode. Use data to draw a scatter graph. Get them to interpret the graph. Re-cap factors, both physical and human that ensure magnitude, by itself, does not determine high rate of fatalities.	PL Powerpoint and resources Calculators Graph paper
7.	**How do the effects of and responses to a tectonic hazard vary between areas of contrasting levels of wealth?** ***1 of 3 lessons*** ▪ Know and identify the primary and secondary effects of a tectonic hazard. ▪ Know and identify immediate and long-term responses to a tectonic hazard. ▪ Begin to contrast effects and responses in contrasting areas (e.g. HIC and LIC/NEE).	Using sources, Processes, People and the environment, Conclusions (G1-7)	Card sort of effects of tectonic hazards into four groups (primary, secondary, immediate and long term responses). Draw from one example to model result for 2nd lesson. Differentiate with group headings or let students classify into their own groups.	Various textbooks, e.g. AQA GCSE, Progress in Geography KS3 Youtube clips BFCJ Work booklet (see PL)
8.	**How do the effects of and responses to a tectonic hazard vary between areas of contrasting levels of wealth?** ***2 of 3 lessons***	Collecting information, People and the environment,	Show clips and provide information on two earthquake case studies (e.g. Chile and Nepal). Students write up findings into two T-Tables (effects and responses).	Various textbooks, e.g. AQA GCSE, Progress in Geography KS3 Youtube clips

	▪ Use named examples to show how the effects and responses to a tectonic hazard vary between two areas of contrasting levels of wealth. ▪ Build up two case studies (information gathering)	Impact, People and their places, Using sources (G1-7)	Using model/template, students create a contrasting wealth example. It could be completed as a WebQuest, or using newspaper clippings, news videos, textbook examples or internet research.	BFCJ Work booklet (see PL)
9.	**How do the effects of and responses to a tectonic hazard vary between areas of contrasting levels of wealth?** ***3 of 3 lessons*** ▪ Comparison focus. *How do we effectively compare?* ▪ Question answering/technique. ▪ Answer an assessment style question based on the information and skills developed.	Written communication, Conclusions, People and their places (G1-7)	Complete task and compare and contrast activity as a class. Alternatively, could run as a paired teaching exercise. Two tectonic hazards, at contrasting levels of wealth, investigated by a pair of students. Write up into T-table structure and then teach the information to each other. Introduce the idea of a Hazard Wall (Top Gear style Cool Wall). Throughout unit, students can rank and classify any case study or examples that occur during their course and put them on the Hazard Wall, depending on severity of effect. Brings forward the idea of comparing across the natural hazard types	Various textbooks, e.g. AQA GCSE, Progress in Geography KS3 Youtube clips BFCJ Work booklet (see PL)
10.	**What are the reasons why people continue to live in areas at risk from tectonic hazards?** ▪ Identify reasons for living close to volcanoes, e.g. farming, tourism, geothermal energy.	Describing places, Processes, Impact, People and the environment (G1-7)	Enquiry Lesson: "Why do we still live in areas at risk?" Show clip – they make a note of all reasons. Card sort to help develop reasoning. Create a mind map using pictures only, no words. Swap with partner to interpret.	Various textbooks, e.g. AQA GCSE, Progress in Geography KS3 Youtube clips BFCJ Work booklet (see PL)
11.	**How can monitoring, prediction, protection and planning reduce the risks from tectonic hazards?** ▪ Describe and explain the '3 P's'. Giving examples. ▪ Begin to assess the 'contrasting levels of wealth' dimension to this. *Why are less developed regions at a disadvantage?*	Written communication, Conclusions, People and their places (G1-7)	Introduce the Three P's (Planning, Prediction and Protection). Students draw out examples of each P from their two case studies. Hypothesise/discuss why the contrasting examples were different.	Various textbooks, e.g. AQA GCSE, Progress in Geography KS3 Youtube clips BFCJ Work booklet (see PL)
12.	**End of unit assessment**			