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| Crust | The outer layer of the Earth. Thin, cold and made of solid rock. |
| Mantle | The middle and biggest layer of the earth. Made of molten (liquid) rock. This layer is warmer than the crust. The liquid rock moves in convection currents. These move the plates around the crust. |
| Outer Core | The 2nd deepest layer of the Earth. It is hotter than the mantle and is made up of liquid metal (iron and nickel). |
| Inner Core | The innermost layer of the Earth (6380 km down). It is very hot (5500˚C) and made up of solid iron, because of this the inner core has the heaviest material in the Earth. The inner core is still solid despite the heat because of the pressure of the rest of the Earth around it. |
| Constructive Plate Boundary | Two plates move away from each other. This creates a gap in the crust which allows magma to come through. This creates a volcano and new crust made of basalt. There are earthquakes and volcanoes here. |
| Destructive Plate Boundary | A continental plate and an oceanic plate move towards each other. The oceanic plate goes (subducts) under the continental plate as the oceanic plate is heavier. The friction causes earthquakes. The friction also creates heat which melts the oceanic crust, creating magma which will build up and create a volcano. The continental plate is also bent up at the edge by the oceanic plate creating fold mountains. |
| Collision Plate Boundary | Two continental plates move towards each other. Neither sinks so they push into each other and move upwards creating a fold mountain. You get earthquakes here. |
| Conservative Plate Boundary | Two plates slide past each other. Sometimes they get stuck. This creates pressure. The thing they got stuck on eventually breaks and the pressure is suddenly released as the shaking of the earthquake. |

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| Richter Scale | The scale on which an earthquake is measured. |
| Magnitude | How strong an earthquake is on the Richter scale |
| Focus | The place deep in the earth where the rocks move. |
| Epicentre | The point at the surface directly above the focus. |
| After-shock | Smaller earthquakes after the main, large one. |
| Seismometer | An instrument to measure the strength of the earthquake. |
| Preparation | Making sure people know what to do in an earthquake and are ready to respond (e.g. emergency kits and evacuation centres). |
| Prediction | Making a guess on when an earthquake might happen. |
| Prevention | Making buildings stronger/safer for example putting in counter weights or shutters. |
| Primary Effects | Effects that happen immediately after the event e.g. deaths, buildings destroyed. |
| Secondary Effects | Effects that happen in the weeks/months after the event e.g. homelessness, |

| **Volcano Case Study: Mt St Helens 1980** | |
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| Where: | Washington State, NW USA |
| Cause: | A destructive plate margin between the Juan de Fuca plate and the North American plate. |
| Primary Effects: | 63 dead, pyroclastic flows knocked down 230 square miles for forests, lahars destroyed many bridges. |
| Secondary Effects: | Tourists didn't visit the area for over a year because of the damage and fears of other eruptions. Many homeowners were homeless as their houses had been destroyed. Traffic problems due to collapsed buildings. |
| Responses: | - Spirt Lake had a drainage channel put in to prevent the lake overflowing due to the debris.<br>- A volcano observatory was set up to monitor the volcano in future. |

| **Earthquake Case Study: Haiti 2010** | |
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| Where: | Haiti, Caribbean |
| Cause: | A conservative plate boundary between the Caribbean and the North American plate. |
| Primary Effects: | 230,000 dead and many buildings destroyed. |
| Secondary Effects: | Cholera spread due to dirty water and poor sanitation. |
| Responses: | -Many charities sent aid to Haiti such as the Red Cross and the Salvation Army.<br>-Tent 'cities' set up to house the homeless. |