Earthquakes and Tsunami Hazards Study Guide

| 1-What are the three kinds of stress in geology? Identify and define each type. | Tension pulls the earth crust to stretch it out. Compression compresses two things to form into an upper shape or to break it. Shearing occurs when two rocks are pushed in different directions. |
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| 2- What is a normal fault? Where is the footwall and hanging wall in a normal fault? | A normal fault is when the hanging wall and the footwall move away from each other.The hanging wall is down and the footwall is up. |
| 3- What is a reverse fault? Where is the footwall and hanging wall in a reverse fault? | A reverse fault is when two things compress together. A reverse fault makes the hanging wall slide up and go over the footwall back to the top. |
| 4- What is a strike-slip fault? Where is the footwall and hanging wall in a strike-slip fault? | A strike slip fault is when two rock walls slide past each other causing the process of grinding. The hanging wall is on the side of the walls and the footwall is up more. |
| 5- How are fault-block mountains formed? | Fault block mountains form by a bunch of folded mountains and valleys in between. |
| 6- What are anticlines and synclines? | An anticline is a fold that bends up into an arch. A syncline is a fold that bends down. |
| 7- Describe how both compression and tension can create mountains and valleys | Compression compresses two things to make the rock fold up and create mountains. Tension pulls the earth's crust which stretches to create valleys |
| 8- How do scientists measure the strength of an earthquake? | Seismograms have different kinds of waves to let them know when earthquakes will appear. |
| 9- What does the increase of each whole number on the Richter scale mean in an earthquake? For example, how much greater is a magnitude 8 earthquake than a magnitude 7 earthquake? | The increase of the Richter scale means it will be 32 times greater. |
| 10- What is an ocean floor uplift? | Ocean floor uplift is when a piece of earth's crust moves up and lifts the things on it upward. |
| 11- How are tsunamis formed? | Tsunamis are formed when earthquakes or landslides happen. |
| 12- Why don’t all earthquakes cause tsunamis? | All earthquakes don’t cause tsunamis because they have to be near the ocean for a tsunami to happen. |