PQ3 Earthquakes (Textbook)

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| **1.** |  |
|  | |  |  | | --- | --- | | In what type of plate boundary would you expect to see a fault like that on the vertical wall shown below? (Hint: use the orangy layer in the middle of the photo as a guide) | | |  | | | |  | **Student Response** | **Value** | **Correct Answer** | | --- | --- | --- | --- | | A. | Divergent |  | tudent Response | | B. | Dormant |  |  | | C. | Convergent |  |  | | D. | Hot spot |  |  | | E. | Transform |  |  | | | | Score: | 0/1 | |  | | |
| **2.** |  |
|  | |  |  | | --- | --- | | The Richter scale is the most common earthquake magnitude scale used by seismologists. | | |  | | | | **Student Response** | **Value** | **Correct Answer** | | --- | --- | --- | | False | 100% | False | | | | Score: | 1/1 | |  | | |
| **3.** |  |
|  | |  |  | | --- | --- | | What type of stress is being exerted in this example? | | |  | | | |  | **Student Response** | **Value** | **Correct Answer** | | --- | --- | --- | --- | | A. | compressional |  | tudent Response | | B. | shear |  |  | | C. | positive |  |  | | D. | rotational |  |  | | E. | tensional |  |  | | | | Score: | 0/1 | |  | | |
| **4.** |  |
|  | |  |  | | --- | --- | | When choosing the best place to buy a house, which piece of information is NOT helpful regarding earthquakes? | | |  | | | |  | **Student Response** | **Value** | **Correct Answer** | | --- | --- | --- | --- | | A. | Make sure the house is built on solid rock. |  |  | | B. | Make sure the house is not next to a building that might collapse onto the house. |  |  | | C. | Make sure that there hasn’t been a big earthquake in the area in the last 5 years. |  | tudent Response | | tudent ResponseD. | Make sure the house is not directly on a fault line. | 0% |  | | E. | Make sure the house isn’t on an unstable hillside. |  |  | | | | Score: | 0/1 | |  | | |
| **5.** |  |
|  | |  |  | | --- | --- | | Are the following strains temporary or permanent? | | |  | | | | **Statement** | **Response** | **Value** | **Correct Match** | | --- | --- | --- | --- | | Elastic Strain | Temporary | 33.33% | Temporary | | Plastic Strain | Temporary | 0.0% | Permanent | | Brittle Strain | Permanent | 33.34% | Permanent | | | | Score: | 0.6667/1 | |  | | |
| **6.** |  |
|  | |  |  | | --- | --- | | Foreshocks, mainshocks, and aftershocks are all part of the earthquake cycle. | | |  | | | | **Student Response** | **Value** | **Correct Answer** | | --- | --- | --- | | True | 100% | True | | | | Score: | 1/1 | |  | | |
| **7.** |  |
|  | |  |  | | --- | --- | | Match the letter with the appropriate tectonic plate boundaries located close to Vancouver. | | |  | | | | **Statement** | **Response** | **Value** | **Correct Match** | | --- | --- | --- | --- | | A | Convergent | 0.0% | Transform | | B | Convergent | 0.0% | Divergent | | C | Transform | 0.0% | Convergent | | D | Divergent | 0.0% | Transform | | | | Score: | 0/1 | |  | | |
| **8.** |  |
|  | |  |  | | --- | --- | | Where do the LARGEST earthquakes occur? | | |  | | | |  | **Student Response** | **Value** | **Correct Answer** | | --- | --- | --- | --- | | tudent ResponseA. | at convergent margins | 100% | tudent Response | | B. | at transform boundaries |  |  | | C. | at spreading centres |  |  | | D. | at divergent margins |  |  | | E. | within plates |  |  | | | | Score: | 1/1 | |  | | |
| **9.** |  |
|  | |  |  | | --- | --- | | "Earthquake intensity" describes the effects of shaking on people and structures. | | |  | | | | **Student Response** | **Value** | **Correct Answer** | | --- | --- | --- | | False | 0% | True | | | | Score: | 0/1 | |  | | |
| **10.** |  |
|  | |  |  | | --- | --- | | Match the following description to the correct wave. | | |  | | | | **Statement** | **Response** | **Value** | **Correct Match** | | --- | --- | --- | --- | | 1st wave recorded on a seismogram | not answered | 0.0% | P Waves | | Travels through solids only | not answered | 0.0% | S Waves | | Surface waves with a rolling motion | not answered | 0.0% | Rayleigh | | Slowest and most damaging seismic waves | not answered | 0.0% | Surface | | Surface waves with a side-to-side motion | not answered | 0.0% | Love | | | | Score: | 0/1 | |  | | |
| **11.** |  |
|  | |  |  | | --- | --- | | You live in a house built on unconsolidated sediments. During an earthquake, you can expect to experience a \_\_\_\_\_\_ Modified Mercalli Intensity compared to that of your neighbours' whose house is built on bedrock. | | |  | | | |  | **Student Response** | **Value** | **Correct Answer** | | --- | --- | --- | --- | | A. | Similar |  |  | | B. | Higher |  | tudent Response | | C. | Lower |  |  | | | | Score: | 0/1 | |  | | |
| **12.** |  |
|  | |  |  | | --- | --- | | The Modified Mercali Scale is a measure of the extent of damage to buildings AND how people perceive the shaking. | | |  | | | | **Student Response** | **Value** | **Correct Answer** | | --- | --- | --- | | not answered | 0% | True | | | | Score: | 0/1 | |  | | |
| **13.** |  |
|  | |  |  | | --- | --- | | Which of the following statements is FALSE? | | |  | | | |  | **Student Response** | **Value** | **Correct Answer** | | --- | --- | --- | --- | | A. | When a fault ruptures, energy is released in the form of seismic waves. |  |  | | B. | A normal fault is the result of a tensional stress. |  |  | | C. | The point where motion begins on the fault is called the epicentre. |  | tudent Response | | D. | A reverse fault is the result of a compressional stress. |  |  | | E. | An earthquake occurs when the stress on a rock is high enough to rupture it. |  |  | | | | Score: | 0/1 | |  | | |
| **14.** |  |
|  | |  |  | | --- | --- | | Which of the following scales is currently the most commonly used by seismologists? | | |  | | | |  | **Student Response** | **Value** | **Correct Answer** | | --- | --- | --- | --- | | A. | Moment Magnitude |  | tudent Response | | B. | Modified Mercali |  |  | | C. | Richter |  |  | | D. | Energy Released |  |  | | E. | Intensity |  |  | | | | Score: | 0/1 | |  | | |
| **15.** |  |
|  | |  |  | | --- | --- | | The San Andreas fault is a \_\_\_\_\_\_. | | |  | | | |  | **Student Response** | **Value** | **Correct Answer** | | --- | --- | --- | --- | | A. | strike slip fault |  | tudent Response | | B. | oblique fault |  |  | | C. | reverse fault |  |  | | D. | dip-slip fault |  |  | | E. | normal fault |  |  | | | | Score: | 0/1 | |  | | |