



Exercise: 1

Instructions: The crust of the earth is constantly moving. This movement can create stress that can change the shape of a body of rock. Sometimes stress builds up between two bodies of rock and they can slide past, over, or under one another fairly quickly. This sudden release of stress can cause earthquakes. Earthquakes are most common near major faults. Use your knowledge to answer the following questions completely and accurately.

1. What is the difference between compressive stress, tensional stress, and shear?

2. What is the difference between strike and dip?

3. Where, in relation to the crust, do most fractures occur compared to most plastic deformations?

4. What is the difference between a joint and a fault? Along which one might you expect more earthquakes to occur?

5. How would one distinguish between a normal fault, reverse fault, and a strike-slip fault?

6. What is a seismic wave?

7. A Richter scale was used to measure an earthquake and a magnitude of 5.6 was obtained. What would be the magnitude of an earthquake 1000 times stronger?

