|  |  |  |  |
| --- | --- | --- | --- |
| **Plate Boundary** | **Type of Stress at the Plate Boundary** | **Type of Fault** | **Position of Hanging Wall** |
| Divergent Boundary |  |  | Hanging Wall (Circle)a) moves up FWb) moves down FW |
| Convergent Boundary |  |  | Hanging Wall (Circle)a) moves up FWb) moves down FW |
| Transform Boundary |  |  | Walls slip past each other. No HW or FW. |

**STUDY GUIDE**

Chapter 4.1 and 4.2 Earthquakes

Name: Class: Date:

**Section 4.1 Forces in Earth’s Crust**

1) Complete the table.

1. Stress force that squeezes rock together:
2. Stress force that pulls rock apart where two plates are moving in opposite directions:

1. How do the plates (rocks) move at a strike-slip fault?
2. Do the plates have any up-and-down motion at a strike-slip fault?
3. Over millions of years, rocks can fold. Explain the difference between anticline and syncline folds.

7) What type of stress causes both anticline and syncline folds in earth’s crust?

**Section 4.2 Earthquakes and Seismic Waves**

1) What causes earthquakes?

2) What are seismic waves?

3) Define focus:

4) Define epicenter:

5) Characterize a P-wave:

6) Characterize an S-wave:

¨7) Characterize a surface wave:

8) What does the Modified Mercalli Scale rate?

9) What does the Moment Magnitude Scale rate?

10) What is aftershock?

**Short Answer Question**

Distinguish between the focus and he epicenter of an earthquake. Draw a diagram to accompany the explanation. Label both points.