Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Unit 4: Review Guide**

1. Label and give a brief definition of the terms for the diagram below.



2. Describe how *density* plays a role in plate tectonics with convection currents.

|  |  |
| --- | --- |
| 3. Draw & explain convergent plate boundaries. a. What types of landforms are created at these boundaries? | 4. Draw & explain divergent plate boundaries. a. What types of landforms are created at these boundaries? |

5. Earthquakes occur at transform plate boundaries. Describe the three different types of faults below.

|  |  |  |  |
| --- | --- | --- | --- |
| Draw the faultType of EQ Damage | Normal | Reverse | Strike Slip |

6. What is the Elastic Rebound Theory?

7. Label the anatomy of an earthquake and list a brief description for each.



8. Name that Wave:

|  |  |  |  |
| --- | --- | --- | --- |
| Fastest Wave |  | Slowest Wave |  |
| Arrives second at seismograph |  | Least destructive |  |
| Most destructive |  | Arrives last at seismograph |  |

9. Draw a picture and annotate the type of movement for each wave.

|  |  |  |
| --- | --- | --- |
|  |  |  |

10. Keep in mind the two most destructive forces from an EQ are: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ & \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

11. If you could create a building or city that was earthquake proof, what would you do? Explain in detail.

12. Label the diagram below:



13. Of the three types of volcanoes:

a. Which is the biggest?

b. Which is the broadest?

c. Which is in the ring of fire?

d. Which has a shortest lifetime?

14. What is sea floor spreading?

15. Application: If the seafloor is spreading at a rate of 1.7 cm/year and a section of the seafloor is 1.15 million years old then how far away from the mid ocean ridge is it in cm?