**SCIENCE // First Semester Final Exam Study Guide**

1. Define a mineral
2. List five properties of minerals that scientists test.
3. What is the name given to test the hardness of a mineral?
4. How do islands form along subduction zones?
5. What is the difference between weathering and erosion?
6. What are the 2 main types of weathering? Give examples of each?
7. What are the agents of erosion?
8. Explain how wind can weather and erode rock.
9. Explain how water can weather and erode rock.
10. What causes deposition and what are landforms formed by deposition?
11. What is the theory of plate tectonics? Give 3 pieces of evidence that supports the theory.
12. How does plate tectonics affect the Earth’s crust every day?
13. Why do earthquakes occur?
14. What is a tsunami?
15. What happens at plate boundaries //

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| **Plate Boundary** | **What Occurs** | **Land formations//Result of Movement** |
| **Convergent** |  |  |
| **Subduction** |  |  |
| **Divergent** |  |  |
| **Transform** |  |  |

1. What are index fossils and why are they important?
2. Explain why a fish fossil could be found in Earth layers on a mountain.
3. Draw and label the layers of the Earth // Include the composition of each layer
4. What happens with temperature, density and pressure as you travel from the crust to the core of the Earth?
5. What is the difference between the lithosphere and asthenosphere? Where is each layer located?
6. What are convection currents and where are they located in the Earth layers? How do they occur? What is their importance to the layers of the Earth?
7. What are the 3 main types of Rocks//

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| Rock Type | How It Formed | Example |
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1. Draw and label the Rock Cycle // Include all process that happen to rocks
2. Draw a Soil Profile. Label each horizon, state its name and explain its importance.
3. What can farmers do to help conserve soil?
4. What problems can deforestation cause?