**Earth Science Mid-Term Study Guide**

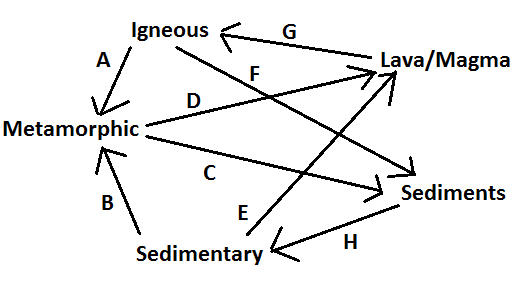
\*\* Complete this for a grade!!\*\*

**Intro to Earth**

1. Seasons
   * Describe how seasons are caused.
   * Why are seasons in the Northern Hemisphere opposite those in the Southern?
2. Latitude vs Longitude
   * Which ways do they measure?
   * Be able to locate a point on a map
3. Draw and label a diagram of the Earth with its 4 layers.
4. Earth’s Movement:
   * Rotation vs Revolution
   * Nutation vs Precession
   * Barycenter
5. How is solar energy essential to plants?
6. Compare and contrast fission and fusion.
7. What does each of the following measure: grams, liters, seconds, meters.

**Rocks**

1. 3 rock types
   * How they are formed
   * Examples of each
2. Rock Cycle: complete the chart



1. What are the 3 organic rocks, and why are they called that?
2. Define the following: luster, streak, fracture, cleavage, density
3. Compare Erosion and Weathering
   * Why are wind, water, and gravity agents of erosion and not weathering?

**Plate Tectonics**

1. Define lithosphere and asthenosphere.
2. What is continental drift?
3. Name and provide the Latin-root origin for the ancient giant landmass and ocean.
4. 3 Types of Plate Boundaries
   * Describe the 3 types
   * Create and label a simple diagram of continental and oceanic subduction
5. What are the 3 forms of convergent boundaries and what does each form?

**Earthquakes**

1. List the 3 types of stress and their associated strain.
2. List the 3 types of faults and their associated stress.
3. Explain the relationship between earthquakes and subduction zones.
4. Draw and label an earthquake diagram.
5. How does the subduction of crustal plates influence the rock cycle?
6. Why are seismic waves of an earthquake more strongly felt at the epicenter of an earthquake?

**Volcanoes**

1. Describe the differences between lava and magma.
2. What is the relationship between volcanoes, earthquakes, and the lithosphere?
3. Define: tephra, lahar, pyroclastic flow
4. Define and compare the 3 volcano types
5. Compare and contrast a crater and a caldera.
6. Define the 3 “life stages” of a volcano.

**Tectonic Disasters**

1. Describe and provide examples of the following:
   * Tsunamis
   * Sinkholes
   * Landslides

**Impact on Lithosphere**

1. Describe the ways we are affecting the lithosphere.
2. What methods are we using to fix the damage we have caused?
3. What are the 4 fossil fuels?
4. Describe the conventional methods of energy.
5. Describe the alternate methods of energy.
6. Provide reasoning as to why we should and should not use conventional methods. Repeat for alternate.