Fall Semester Review: Things to Know 

**Hints for studying for this final exam:**

1. **VOCABULARY!!!! Read the chapter summaries and review the vocabulary for each unit.**
2. **Log on to earthgeu.com and practice their chapter tests.**
3. **Read all your lecture notes. Put post-it notes on each so you can find them!**

Unit One: Measurement & Mapping Ch. 2

1. Know the concept of density and use the formula to calculate one variable.
2. Measurement in the metric system - know units of volume, mass and length and what instruments to use.
3. Reading maps using latitude and longitude, know prime meridian and International Date Line.
4. Understand how time zones work.
5. Know the parts of topographic maps, how to read them, how to calculate slope, and distance and gradient.

Unit Two: Minerals and Basic Chemistry Ch. 3, 4

1. Define and give examples of elements, compounds, and mixtures.
2. Know the parts of an atom: their charges, location, and mass.
3. Know the difference between atomic number and atomic mass and be able to determine each.
4. Define the “rules” to be a mineral.
5. Know the 7 major mineral groups and be able to classify minerals based upon chemical formula.
6. Understand how minerals are identified using tests such as streak, hardness, etc.
7. Know the relationships between minerals and rocks.
8. Describe common uses of minerals

Unit Three-A: Rocks Ch. 5, 6

1. Igneous Rocks – Types, Origin, Composition, and examples. (Understand the scheme for igneous rock identification.)
2. Sedimentary Rocks – VOCABULARY ONLY ~~Types, Origin, Composition, and examples. (Understand the scheme for Sedimentary Rock identification.)~~
3. ~~Metamorphic Rocks – Types, Origin, Composition, and examples. (Understand the scheme for Metamorphic Rock identification.)~~
4. Know how the rock cycle works -- know what processes occur to change one rock type into another.



Unit Three B: Plate Tectonics Ch. 17

1. Know the major plates.
2. Know the types of boundaries and features found at each – general and specific examples.
3. Explain how oceanic crust differs from continental crust in terms of composition, density, and thickness.
4. Explain how Alfred Wegener’s work contributed to the science of Plate Tectonics.
5. Explain how Harry Hess’ work on Seafloor spreading helped contribute to the mechanism of plate movement.
6. Explain how convection currents in the earth move plates.
7. Know layers of the earth. Define lithosphere and asthenosphere.

Unit Four: Volcanos and Earthquakes Ch. 18, 19.

1. Know the three types of magma and how they relate to three types of volcanos.
2. Know the three types of volcanos, locations, relative size, eruptive force, shape and composition.
3. Know parts of a volcano and major igneous formations (batholith, sill, dike etc.).
4. Know three types of faults and the types of forces that act upon them.
5. Know the three types of waves, relative speed, shape and how they contribute to the understanding of the earth’s interior.
6. Relate earthquakes to plate tectonics.
7. Recognize three types of fault.
8. Explain how different stress forces cause different faults.
9. Describe two types of seismic waves, and what they teach us.
10. Know the names and characteristics of earth’s four layers.
11. Use the Mercalli scale to describe an earthquake’s effects.



1. Know how Richter scale value is derived.
2. Know the differences between the Mercalli and Richter scales.
3. Use a lag time graph to find the distance to an epicenter.

Unit 5 : Ch. 20, 21, 22

Review info will be handed out in class.