Study Guide for Earth Science Final Exam—200 questions, multiple choice. You may only use the following items on the final:

- 1. Calculator
- 2. Earth Science reference tables
- 3. Layers of earth flip book
- 4. Planet transparency notes
- 5. Atmosphere foldable
- 6. Cloud ID sheet

## Ch. 1 Intro to Earth—29 questions

1.5—Be able to give steps in scientific method and define each.

Know difference between observation and measurement

- 1.1—Know branches of earth science and what is studied in each.
- 1.2—Know spheres of earth and what is contained in each
- 1.4—What are systems, why is earth a system, what powers earth as a system Compare and contrast open and closed systems

1.3—Mapping, be able to read coordinates on a Mercator map, be able to define contour interval and relate it to the slope of a terrain and determine altitude on a topographic map, recognize depressions and common map symbols, read distance from map scale (18 questions on this section alone)

## Ch. 2—Chemistry & minerals—43 questions

2.1—Chemistry-- Be able to count  $p^+$ , n, &  $e^-$  in an atom from atomic number and mass number

Be able to give the atomic # and mass # from p<sup>+</sup>, n, & e<sup>-</sup> in an atom

Identify the 3 types of chemical bonds, give examples and properties of each

Give names and/or formulas for binary ionic compounds

Give names and/or formulas for binary covalent compounds

Compare and contrast ion and isotope and define each.

List 3 phases of matter (s, l, g) and give properties of each

Parts of the atom ( $p^+$ , n, &  $e^-$ ) and properties and location of each.

Be able to convert metric units

Convert temps from C to K and K to C.

2.2 & 2.3 Minerals— (13 of the 43 questions come from minerals)

Know the definition of a mineral.

Know the groups of minerals and be able to classify minerals into the groups.

Be able to diagram a silicon oxygen tetrahedron

Be able to define the properties of minerals and apply them.

Ch.3 Rocks-34 questions

Know the definition of a rock.