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10/9/14

Geology

* Homework number should be close to 1 (.94??)
* To find the B value.
  + Slope of the line
  + Plot number of Earthquakes (y axis)
  + Magnitude (x )
    - Should be a max value in your data set
      * Ex ( 6 mag - 2.5 mag = 3.5)
      * Max number of earthquakes from 2.5 up to 6 = 1250 (how many earthquakes)
      * log10 (1250 / 3.5) aprox = 1
* EQ rate (Need a log linear graph)
  + Eq/yr
    - x values are the magnitude
    - y values are the
    - 1000 mag 2
    - 100 mag 3-4
    - 10 mag 4-5
      * 1000 / 10
      * 100/ 10
      * 10/ 10
        + use the reciprocol
* 5 pt extra credit if done in excel ( use the growth function)
* Wasatch Fault
  + About a 60 % chance of a big earthquake on the salt lake segment
* Why Study Volcanoes
  + Volcanoes are a major hazard
  + They create new mineral and energy resources and land
  + Give us clues about what is inside the earth
* Igneous Rocks
  + Magma or melted rock
  + Extrusive
    - Lava
  + Intrusive
    - in the earths surface
    - Lead copper zinc
* Properties of magma
  + Gasses
    - All magma contains 5% of gas
      * Think like opening a coke
    - Water vapor and co2
  + Pressure
    - Hot magma is less dense than the rocks surrounding it
  + Temperature
    - Different magmas have different temperature
  + Viscocity
    - How thick it is
* 3 types of volcanoes
  + NEED TO KNOW