Name _____ Unit 12 Deposition
Period _____ Date _____ Earth Science

I. Deposition - when an agent of erosion deposits (drops) the sediment.
   a. results from a loss of energy.
   b. Most deposition takes place in water
   c. The sediments that are deposited may under go processes to make them turn into Sedimentary rock.

II. Factors that Affect Deposition (dropping)
   a. particle size - the greater the size, the greater the settling rate.
   b. particle shape - the more spherical the shape, the greater the settling rate.
      i. Flat, angular and irregularly shaped particles settle slower.
      ii. Smooth and round particles settle quicker.
   c. particle density - the greater the density, the greater the settling rate (if all the other factors are the same like size and shape).
   d. Velocity (speed)
      i. The faster the medium, the lower the settling rate.
      ii. The slower the medium, the higher the settling rate.
      iii. Rate and time
         1. The greater the settling rate, the less time it takes.
         2. The lower the settling rate, the more time it takes.
   e. Saturation of Dissolved minerals
      i. Evaporation, temperature changes or an increased amount of dissolved minerals in a body of water would make the water unable to hold any more dissolved minerals.
      ii. Any more minerals will Not dissolve and settle to the bottom.
      iii. Some minerals may precipitate to form crystals of minerals or rocks.

III. Sorting of Sediments
   a. During deposition sediments of similar size, shape or density get separated (sorted) by types.
   b. Deposition happens when the velocity decreases
   c. Horizontal sorting happens when a stream enters a large body of water and the larger, denser, rounder particles settle out first. The smaller, less dense particles are carried farther from shore.
   d. Vertical sorting - happens when a landslide dumps sediments into the ocean.
   e. Graded Bedding - happens after a series of vertical sorting events.