4.2 Notes Continued  
Soil Properties  
Draw the three sizes of particles:

|  |  |  |
| --- | --- | --- |
| **SAND (largest)** | **SILT (smaller)** | **CLAY (smallest)** |

**Properties that affect soil quality:**  
Color:  
-comes from iron compounds and humus  
-lots of iron = reddish color  
-lots of humus = black/brown color  
-bright color = soil drains well  
  
Pore Space:   
-spaces between soil particles  
-water and air move through particles  
-best soil = ½ pore space is water, ½ pore space is air  
  
Texture:  
-determined by size of weathered rock particles (sand, silt, clay)  
  
Chemistry (pH):   
-how well nutrients dissolve in the water in soil depends on the   
water’s pH (measure of acidity)  
-High amounts of lime in soil = less acidic  
-High amounts of acid in soil = more acidic