Geology 100 Notes on Planet Earth version 3.0

Review - Exam 2 Chapter 5

Chapter 5 - Soils

A soil is a natural body consisting of layers of mineral and/or organic constituents of variable thicknesses, which differ from their parent materials in their morphological, physical, chemical, and mineralogical properties, and their biologic characteristics (Birkeland, 1999).



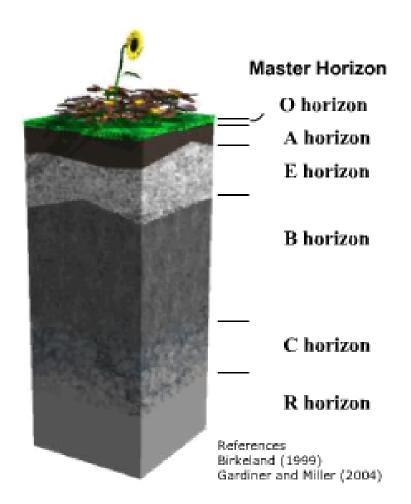
Living Plants and other Organisms

Soil: various horizons or layers composed of differning amounts of solids, liquids, and gases

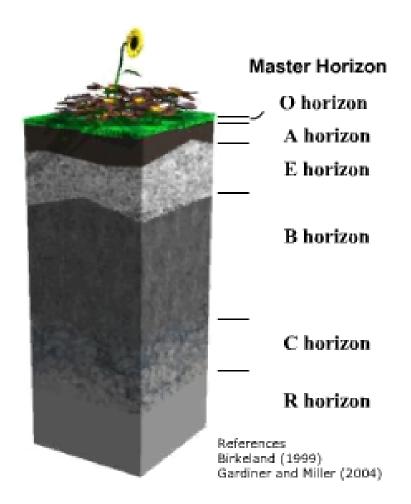
> Unweathered Bedrock

Eluviation versus illuviation

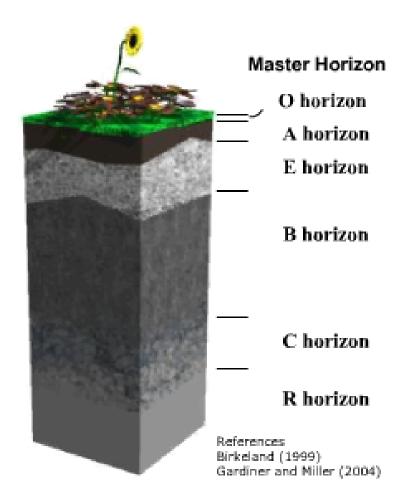
O versus A



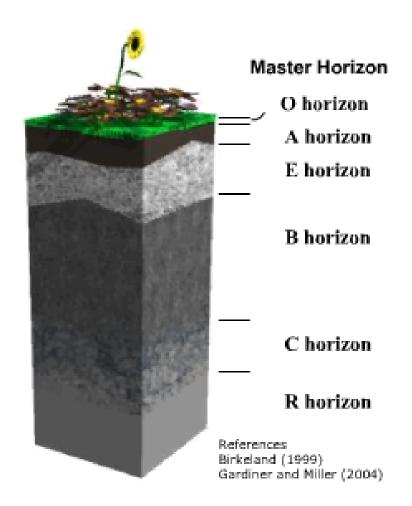
How would you characterize the E master horizon



What important process occurs within the B master horizon?



How do the C and R master horizons differ?



Can you explain the role that each of these 3 factors plays in soil development?

- Climate
- Topographic Relief
- Composition

Can you explain the role that each of these 2 factors plays in soil development?

- Organic activity
- Time

The 12 soil Orders

- Entisols
- Inceptisols
- Alfisols
- Spodosols
- Ultrasols
- Oxisols

The 12 soil Orders

- Gelisols
- Aridisols
- Histosols
- Vertisols
- Andisols
- Mollisols