

# UNIT B: COMPONENTS OF SOIL

## Lesson 1: Holes of Soil

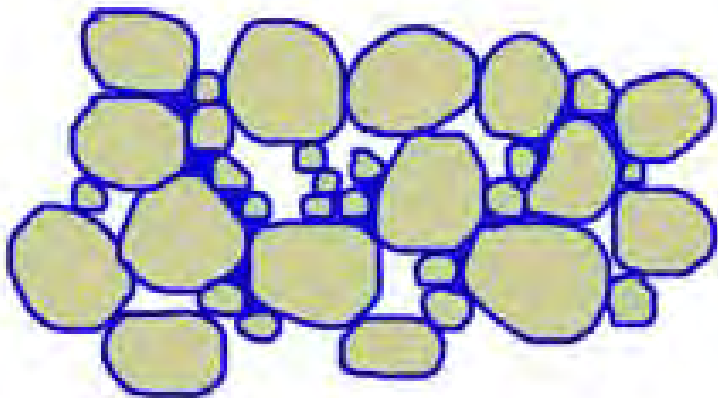
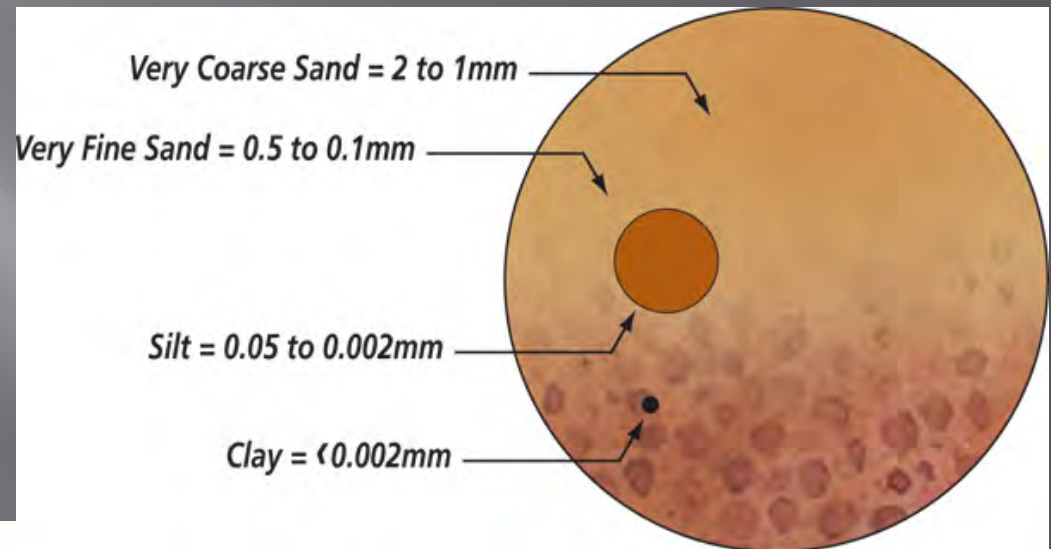
# Terms

- ▣ Large Holes
- ▣ Small Holes

# Differences between large and small holes in soil

- ▣ Holes in soil are the spaces between soil particles in a soil sample. They are defined in two ways:
  - **Large holes** are found in sandy soils due to the large surface area found on separate sand particles.
  - **Small holes** are found in soils with predominately clay and silt as they have smaller surface areas when compared to sand.

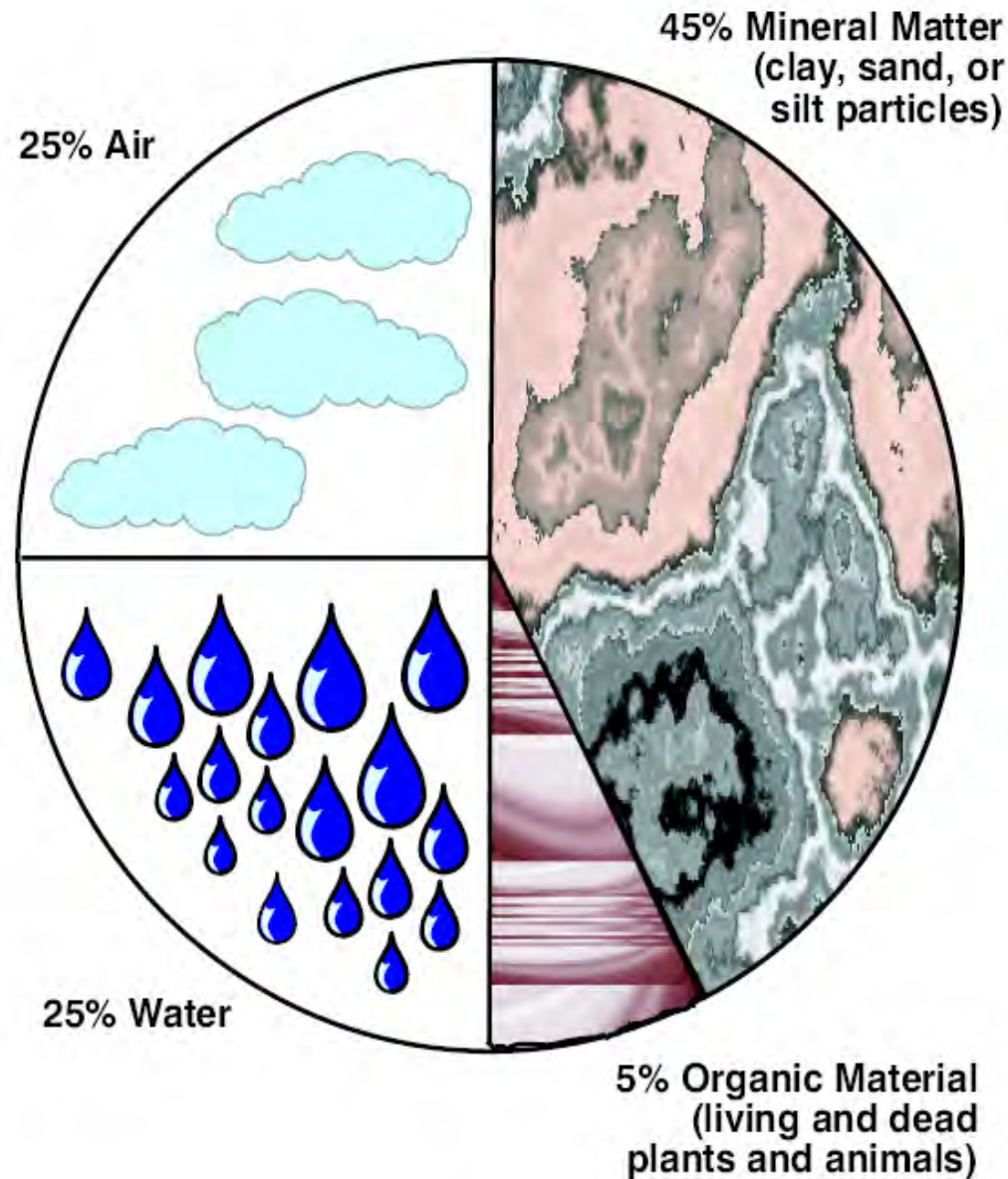
# Differences between large and small holes in soil



# Differences between large and small holes in soil

- ▣ Soil is made of four sections.
  - 45% minerals of soil; sand, silt, and clay.
  - 25% air
  - 25% water
  - 5% organic matter

# Composition of Average Soil



# Importance of large holes and small holes in soil

- ▣ Large holes are important for water drainage to allow air to travel through the soil for the roots of a plant to respire. Soils high in sand will have fewer and larger holes which creates the easiest pathway for the movement of air and water through the soil.

# Importance of large holes and small holes in soil

- ▣ Small holes hold water in place where plant roots can use the water when there is no rain. Soil particles like silt and clay have many small holes which retains more water and nutrients in the soil.



# Review/Summary

- ▣ How is each soil unique?
- ▣ What is the difference between soils with large holes and soils with small holes?
- ▣ What type of soil holes are located in local soils?