

Soils Unit Study Guide

What four things make up soil?

What are the approximate percentages of Sand, Silt, and Clay for a “loam” soil?

Sand %

Silt %

Clay %

What are the “BIG 3” soil nutrients? List them and explain why each is needed by plants.

a.

b.

c.

What are the 3 soil particle sizes (or **textures**)? Write them in order from biggest to smallest particle size.

Biggest-

Medium-

Smallest-

Be able to use the Union County Soil Survey to determine the soil name for a location in the Lewisburg area. (The 3 letter abbreviation is fine). Example: the Penitentiary.

1. Use the soil texture pyramid to determine the soil texture of a soil if given %sand, % silt, and % clay. (use the pyramid printed on your lab paper. On the quiz I will provide you with a new pyramid to use.)

Example: 20% sand, 30% silt, 50% clay.

Part II. What does your answer to the previous question tell you may happen during and after a rainstorm in the location where this soil sample was taken?

Be able to calculate how much of a stream has a riparian buffer zone using a map! For example; Buffalo Creek is about 10 miles long. Only 2.5 miles still have riparian buffers. What percent is this?

In class we talked about 4 benefits provided by riparian buffers. Write them down:

- 1.
- 2.
- 3.
- 4.

Know the difference between point and non-point source pollution, and be able to give an example of both.

Point source pollution -
Example:

Non-point source pollution –
Example:

The “Dust Bowl” was caused by humans plowing up soil that had been protected by grass roots for thousands of years. What **force** of nature eroded this soil?

How much of the Earth’s surface is soil suitable for farming?