

Soils

1. (1 point) What are the five soil forming factors?
 - a. Climate, living organisms, minerals, chemicals, time
 - b. Parent material, climate, vegetation, topography/relief, time
 - c. Parent material, horizons, glaciers, landscape position, time
 - d. Living organisms, minerals, climate, landscape position, glaciers

2. (1 point) Soil parent material is divided into 6 classes: glacial drift, loess, alluvium, colluvium, residuum, and peat. Where in Iowa would you expect to find glacial drift as the parent material?
 - a. In the loess hills of western Iowa
 - b. In the prairie potholes region of northern Iowa
 - c. In the farm fields of central Iowa
 - d. In the Mississippi River floodplains of eastern Iowa

3. (1 point) What color is clay?
 - a. It ranges from light gray to dark gray
 - b. It ranges from yellow to light brown
 - c. It depends on the location in Iowa
 - d. Clay is not a color but a soil separate less than 0.002 mm in size

4. (1 point) Long term no-till does which of the following:
 - a. Improves soil structure and provides protection from raindrop impact.
 - b. Increases water infiltration.
 - c. Reduces cation exchange capacity.
 - d. A & B

5. (1 point) Soil compaction, such as from an ATV or heavy machinery, increases water run off by decreasing soil porosity.
 - a. True
 - b. False

6. (1 point) Over time, soils tend to become more _____ as they develop.
 - a. Leached and silty
 - b. Clayey and leached
 - c. Organic and steep
 - d. Saturated and calci

7. (1 point) What is the name of the equipment labeled A?
 - a. _____

8. (1 point) What is the texture of the provided soil sample?
 - a. _____

9. (1 point) Using the soil profile provided, what is the thickness of the A horizon?
- 0-6 inches
 - 7-10 inches
 - 11-14 inches
 - 15-18 inches
 - Greater than 18 inches

Use the soil survey book to answer that following questions.

10. (1 point) Which of the following trees would you plant on Le Sueur (325)?
- Eastern cottonwood and white oak
 - American basswood and Eastern cottonwood
 - Black walnut and northern red oak
 - American basswood and silver maples
11. (1 point) What does the # symbol mean on the soil maps?
- Sewage lagoon
 - Severely eroded spot
 - Shale outcrop
 - Glacial till outcrop
12. (1 point) What is the soil that is adjacent to the stream?
- 135 – Coland clay loam
 - 203 – Cylinder loam
 - 138B – Clarion loam
 - 55 – Nicollet loam