

Unit: Soil Management

Name _____

Lesson 2: Using Soil Survey Manuals

Date _____

Evaluation

Circle the letter that corresponds to the best answer.

1. Where can soil survey manuals be obtained?
 - a. Local US post office
 - b. Soil and Water Conservation district
 - c. Farm Credit Service
 - d. US Soil Evaluation Center

Correct answer is b.

2. Soil maps for more detailed land use planning show the land using what type of pictures?
 - a. Aerial
 - b. Panoramic
 - c. Color
 - d. Topographic

Correct answer is a.

Correctly match the appropriate drainage class with the description of that class.

- | | | |
|----------|--|---------------------------------|
| b | 3. Very porous; freely permeable for great depths | a. Well drained |
| g | 4. Wet for many months of the year; mottling prominent throughout the profile; artificial drainage required for crop growth | b. Excessively drained |
| f | 5. Slower internal water movement; more mottling further up the profile; artificial drainage suggested for alfalfa crop | c. Somewhat poorly drained |
| d | 6. Wet almost every month of the year; usually gray in color with mottling on the surface; artificial drainage may be difficult to install but is required for crop growth | d. Very poorly drained |
| e | 7. Water and air move freely, but slower than other soils | e. Somewhat excessively drained |
| | | f. Moderately well drained |
| | | g. Poorly drained |

- c 8. Surface is wet for many weeks throughout the year; mottling is prominent just below the surface; artificial drainage usually needed
- a 9. Most often sandy or intermediately textured soils; color is uniform except near the deep water table, where it becomes mottled

Questions 10 and 11 are essay. Go to questions 12-19.

Complete the following short answer questions.

- 10. What are the steps in locating property in a soil survey manual?
- 11. What is the difference between the permanent and temporary limitations used in determining a soil's uses? Give an example of each.

Match the soil classification on the right with its description on the left.

- | | |
|--|---------|
| b 12. Requires moderate conservation practices | a. I |
| h 13. Mountainous areas | b. II |
| e 14. Prevents use of standard farm equipment due to limitations | c. III |
| d 15. Requires very careful management and/or special conservation practices | d. IV |
| a 16. Very few limitations | e. V |
| g 17. Very severe limitations | f. VI |
| c 18. Requires special conservation practices with extra costs and effort | g. VII |
| f 19. Used for grassland, range, or wildlife due to severe limitations | h. VIII |

The rest are essay questions.

List potential problems affecting plant growth for each of these factors.

20. Erosion:

21. Permeability:

22. Soil texture: