

Studying Soils Scientifically

Study Guide

1. How does soil form?
2. Which type of climate does soil form the quickest? Why?
3. Which type of climate does soil form the slowest? Why?
4. What is another name for the soil layers?
5. List the correct order in which soil horizons form.
6. Horizon O is the ____.
7. Horizon A is the ____.
8. Horizon B is the ____.
9. Horizon C is the ____.
10. Horizon D is the ____.
11. Study your soil profile diagram on p. _____ of your ISN. Know the layers/horizons in order.
12. Explain the composition of topsoil.
13. Where do plants get most of their nutrients?
14. Arrange the particles of soil in order according to size (smallest to largest).
15. Soil with a sticky texture has a large composition of _____.
16. Soil with a silky texture has a large composition of _____.
17. Which particle can water move through the quickest? Why?
18. Which particle does water not move through quickly? Why?
19. Why does soil need adequate amounts of sand, silt, and clay?
20. List the layers of soil in order, beginning with the outermost layer.
21. List 4 things plants need to survive.
22. You have a plant that is dying. You think the soil is lacking nutrients. How would you test this?
23. The layer of loose, weathered material on Earth's surface in which plants can grow is ____.
24. The solid layer of rock beneath the soil is called ____.
25. The decayed organic material in soil is called ____.
26. The layer of soil that contains some organic matter and nutrients washed down from the topsoil is ____.
27. The layer of soil that contains weathered bedrock and little to no humus is ____.

28. Describe the following soil conservations methods and list the type(s) of erosion they reduce.

Soil Conservation Method	Definition/Description	Illustration	Type(s) of Erosion Reduced
Terracing			
Strip Cropping			
Crop Rotation			
Contour Plowing			
No-till Farming			
Windbreak			

***Bonus – Explain 2 ways in which earthworms benefit the soil.