Soils and Gardening

Name: Hour Date:

Date Assignment is due: Why late?
 Day of Week Date If your project was late, describe why

Complete this sheet using the PowerPoint notes in class. Notes can be obtained at: <http://www2.waterforduhs.k12.wi.us/staffweb/Kohn/Plant%20Science/Soils%20and%20Gardening.pptx>

1. What is soil?
2. What is dirt?
3. What are the four things that soil provides for plants?
	* 1.
		2.
		3.
		4.
4. What are 8 characteristics of good soil?
	* 1.
		2.
		3.
		4.
		5.
		6.
		7.
		8.
5. What are the percentages of the following components of soil?
	1. Sand, silt, and clay: c. Air
	2. Water d. Organic Matter
6. What mineral comprises sand and silt?
7. Draw sand, silt, and clay particles on the basis of their size:
8. What is soil texture?
9. What is a loam soil?
10. What is soil structure?
11. If your plot has poor soil texture and poor soil structure, which could you change with good management practices? Explain:
12. Name one example for each of the following kinds of organic soil components:
	1. Alive
	2. Dying
	3. Decomposing
13. Define humus:
14. The the soil, the better
15. Provide three characteristics of good soil:
	* 1.
		2.
		3.
16. How is it that prairies and forests had good soil fertility without the tillage or fertilization of modern agriculture?
17. What is the primary role played by living organisms in the soil?
18. What is the primary function of earthworms in the soil?
19. What are three ways to increase earthworm numbers in the soil?
	* 1.
		2.
		3.
20. What function do arthropods perform in the soil?
21. What function do soil bacteria perform in regards to soil fertility
22. Soybeans require intense amounts of nitrogen but need far less fertilizer than corn. Why is this? Answer using the term *Rhizobium*
23. What are four other benefits provided by soil bacteria to plants?
	* 1.
		2.
		3.
		4.
24. What are three examples of fungi?
25. What are mycorrhizae?
26. On the next page, describe the perfect soil. Be sure to include the following:
	1. Soil Texture
	2. Soil Structure
	3. Soil Color
	4. Air, water, organic, and mineral components
	5. Living organisms in the soil (mention at least 5) and benefits provided

Soil Texture

Soil Structure

Soil Color

Air, water, organic, and mineral components

Living organisms in the soil (mention at least 5) and benefits provided