

Name \_\_\_\_\_

Score: \_\_\_\_\_

Date: \_\_\_\_\_

Class: \_\_\_\_\_

**Directions:** Using the information on the soils PowerPoint to answer the following questions to the best of your ability.

1. How many chemical elements are required to ensure growth and survival of the plant?

\_\_\_\_\_

2. Chemical elements are broken into two categories, what are they?

1. \_\_\_\_\_

2. \_\_\_\_\_

3. What are three non-mineral elements?

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. List two places those non-mineral elements would be found.

1. \_\_\_\_\_

2. \_\_\_\_\_

5. What is the importance to these elements to the plant?

\_\_\_\_\_  
\_\_\_\_\_

6. Define photosynthesis:

\_\_\_\_\_  
\_\_\_\_\_

7. Describe how mineral nutrients are absorbed by the plant.

\_\_\_\_\_  
\_\_\_\_\_

8. Why are mineral nutrients of concern to farmers?

\_\_\_\_\_  
\_\_\_\_\_

9. Mineral nutrients are broken down into two categories, list them.

1. \_\_\_\_\_

2. \_\_\_\_\_

10. What is the difference between the two type's mineral nutrient categories?

\_\_\_\_\_  
\_\_\_\_\_

11. What element is represented by the letter N? \_\_\_\_\_

12. What element is represented by the letter P? \_\_\_\_\_

13. What element is represented by the letter K? \_\_\_\_\_

14. Which of the three primary macronutrients gives chlorophyll its green color?

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15. Which of the three primary macronutrients is responsible for green leaf and forage crops?

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16. A legume pulls what primary macronutrient directly from the air? \_\_\_\_\_

17. Which primary macronutrient is responsible for blooming of flowers and root development? \_\_\_\_\_

18. Potassium is responsible for the development of what? \_\_\_\_\_

19. Why is crop rotation important?

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20. Explain Nitrogen fixation in the soil and what plants do it.

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21. Why do we generally only care about the primary macronutrients?

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