Science Test – Chapter 13 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

Matching: Match each term with the correct definition.

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| 1. \_\_\_\_ geotropism | 1. One of the small openings in the cork layer (bark) of woody roots and stems through which gases enter and exit |
| 1. \_\_\_\_ guard cell | 1. Openings between guard cells of a leaf; permit gasses to pass into and out of the leaf |
| 1. \_\_\_\_ hormone | 1. The growth of a plant part in a certain direction in response to gravity |
| 1. \_\_\_\_ lenticels | 1. A tubular outgrowth of epidermal cells of the roots of plants; it aids in absorbing water |
| 1. \_\_\_\_ meristem | 1. The release of water from leaves through stomata |
| 1. \_\_\_\_ photoperiodism | 1. One of the cells that surround a stomata and control the opening and closing of the stomata |
| 1. \_\_\_\_ phototropism | 1. Special areas where cell division and growth of a plant occur |
| 1. \_\_\_\_ root hair | 1. The response of a plant to changes in the length of daylight and night |
| 1. \_\_\_\_ stomata | 1. A chemical produced by living cells which are transported to other body tissues, where it causes a specific effect |
| 1. \_\_\_\_ transpiration | 1. The growth response of a plant part in a certain direction in response to light |

True or false: Determine whether each statement is true or false.

1. \_\_\_\_ It is partly due to transpiration that water is able to pulled up a plant.
2. \_\_\_\_ Air exchange in soil is helped by earthworms.
3. \_\_\_\_ Root hairs decrease the surface area of a plant root.
4. \_\_\_\_ Roots may rot with a lack of light.
5. \_\_\_\_ Stomata and guard cells are located on the underside of a leaf.
6. \_\_\_\_ Because of root hairs, a plant is able to absorb water at a much faster rate.
7. \_\_\_\_ Some sugar is stored as a starch in some plants.
8. \_\_\_\_ Photosynthesis takes place in the stem.
9. \_\_\_\_ A tropism is a growth response to the environment.
10. \_\_\_\_ It is possible to created water-logged soil.

Short answer: Answer each question with complete sentences.

1. What three things does photosynthesis require?

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1. Define geotropism

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1. Define what photoperiodism is and what are the different kinds of photoperiodism?

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