

Name \_\_\_\_\_ Date \_\_\_\_\_ Block \_\_\_\_\_

## **World of Plants**

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*Directions:*

Go the Science Queen website at [www.thesciencequeen.net](http://www.thesciencequeen.net) Click on students, 6th grade, and Projects.

### **Site #1: Bio4Kids**

1. What do all plants have in common? \_\_\_\_\_

*Click on Photosynthesis in the right hand menu.*

2. Plants mostly absorb \_\_\_\_\_ and \_\_\_\_\_ wavelengths.
3. Within this cell organelle is the chlorophyll that captures the light from the Sun. \_\_\_\_\_
4. \_\_\_\_\_ is the magic compound that can grab that sunlight and start the whole process.
5. The two parts of photosynthesis are \_\_\_\_\_ reaction and \_\_\_\_\_ reaction.

*Click on Plant Structure in the right hand menu.*

6. Vascular plants share a similar set of structures called \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.
7. These structures are designed to pull water and minerals from whatever material the plant sits on. \_\_\_\_\_
8. These structures make the roots look fuzzy and help in the absorption of water and nutrients. \_\_\_\_\_
9. The majority of the plant you see is made up of \_\_\_\_\_ and \_\_\_\_\_.

*Click on Xylem-Phloem in the right hand menu.*

10. \_\_\_\_\_ and \_\_\_\_\_ move up while \_\_\_\_\_ move down to the roots.
11. The \_\_\_\_\_ of a plant is the system of tubes and transport cells that circulates water and dissolved minerals.
12. When someone cuts an old tree down, they reveal a set of \_\_\_\_\_. Those rings are the remains of old \_\_\_\_\_ tissue, \_\_\_\_\_ ring for every year the tree was \_\_\_\_\_.
13. \_\_\_\_\_ transports the sugars and other molecules created by the plant.

*Click on Special Structures in the right hand menu.*

14. Thick leaves on a plant store \_\_\_\_\_ and long twisting vine-like leaves \_\_\_\_\_.
15. A Daisy is actually dozens of \_\_\_\_\_.
16. Corks in wine bottles are actually from the \_\_\_\_\_ of a tree.
17. A cactus has no leaves which means very little \_\_\_\_\_ on hot days.

*Click on Angiosperms in the right hand menu*

18. Flowers evolved to help plants \_\_\_\_\_.
19. There are two kinds of seeds in the angiosperms, \_\_\_\_\_ and \_\_\_\_\_.
20. Two of the characteristics of monocots are that their flowers have \_\_\_\_\_ in numbers of \_\_\_\_\_ and their leaves are made of \_\_\_\_\_.
21. Characteristics of dicotyledon are they have flowers with \_\_\_\_\_ in numbers of \_\_\_\_\_ and \_\_\_\_\_. They also have really \_\_\_\_\_ leaves with \_\_\_\_\_ all over.

**Site #2 Flower Dissection**

- 22. What does the stamen do? \_\_\_\_\_
- 23. The main job of the petals is \_\_\_\_\_
- 24. The main job of the sepals is \_\_\_\_\_
- 25. The main job of the nectaries is \_\_\_\_\_
- 26. The main job of the receptacle is \_\_\_\_\_
- 27. The three main parts of a carpel are \_\_\_\_\_

**Site #3 Carnivorous Plants**

- 28. Most plants get nitrogen from the soil, but carnivorous plants get nitrogen from \_\_\_\_\_.
- 29. Pitfall traps of pitcher plants are leaves folded into deep, slippery \_\_\_\_\_ filled with \_\_\_\_\_.
- 30. \_\_\_\_\_ of sundews and butterworts are leaves covered in stalked glands that exude sticky mucilage.
- 31. Snap traps of the Venus flytrap are \_\_\_\_\_ leaves that snap shut when \_\_\_\_\_ are touched.
- 32. Suction traps, unique to \_\_\_\_\_, are highly modified leaves in the shape of a \_\_\_\_\_ with a hinged door lined with trigger hairs.
- 33. \_\_\_\_\_ traps of corkscrew plants are twisted tubular channels lined with \_\_\_\_\_ and \_\_\_\_\_.

**Site #4 Transpiration**

- 34. Transpiration explains how \_\_\_\_\_ moves up the plant \_\_\_\_\_ in tubes made of dead xylem cells without the use of a pump.
- 35. Plants can slow down transpiration by \_\_\_\_\_.

36. In bright light transpiration \_\_\_\_\_.

37. Transpiration is \_\_\_\_\_ in higher temperatures.

38. Transpiration is slower in \_\_\_\_\_ conditions

### **Site# 5 Great Plant Escape**

*Click on Case# 1 & then Facts of the Case*

39. A plant's life cycle describes how long a plant lives or how long it takes to grow, flower, and set seed. Plants can be either an \_\_\_\_\_, \_\_\_\_\_, or \_\_\_\_\_.

40. Annual plants are plants that complete its life cycle in \_\_\_\_\_. It will grow, flower, set seed, and die.  
Examples \_\_\_\_\_.

41. Perennial is a plant that lives for \_\_\_\_\_ years. It can grow, flower, and set seed for many years. Examples: \_\_\_\_\_, chrysanthemums, and \_\_\_\_\_.

42. An example of a plant with a tap root system is \_\_\_\_\_. An example of a plant with a fibrous root system is \_\_\_\_\_.

43. Do Cases 2 -6.

When you are finished, please turn in your packet and click on the when you are finished link.