# **Plant Structure and Classification Comprehension Check**

Use the vocabulary words in the box to complete the sentences in questions 1-5.

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| Vascular Angiosperm  Nonvascular Botany Gymnosperm |

1. A(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a plant that produces flowers, which can include fruits like oranges, peas, and even acorns.
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ plants grow in moist, shady places and do not have true roots because they do not have special tissues to help carry food and water to their structures.
3. People who study plants study \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. Most plants are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and have special tissues that carry food and water throughout the plant.
5. Plants that do not produce flowers are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
6. Consider how the kingdom taxonomy is organized. What happens as you move down the levels?
7. What are roots and what function do they serve in plants?
8. What characteristics do scientists consider when using a flower’s petals to determine a plant’s genus and species?
9. How do animals help plants survive and reproduce?
10. Who was Tu Youyou and what was her claim to fame?

# **Plant Structure and Classification Comprehension Check Answer Key**

Use the vocabulary words in the box to complete the sentences in questions 1-5.

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| Vascular Angiosperm  Nonvascular Botany Gymnosperm |

1. A(n) angiosperm is a plant that produces flowers, which can include fruits like oranges, peas, and even acorns.
2. Nonvascular plants grow in moist, shady places and do not have true roots because they do not have special tissues to help carry food and water to their structures.
3. People who study plants study botany.
4. Most plants are vascular and have special tissues that carry food and water throughout the plant.
5. Plants that do not produce flowers are called gymnosperm.
6. Consider how the kingdom taxonomy is organized. What happens as you move down the levels?
   1. As you move down the levels of the kingdom taxonomy, the relationships between the animals become closer. They are more similar toward the bottom of the taxonomy than the top of the taxonomy.
7. What are roots and what function do they serve in plants?
   1. Roots are the part of a plant that collects water and nutrients. Most roots grow underground and get water and nutrients from the soil. Roots also help to hold a plant in one place. Sometimes roots store extra food for plants. Some roots can even be eaten like carrots, beets, and radishes!
8. What characteristics do scientists consider when using a flower’s petals to determine a plant’s genus and species?
   1. Botanists consider the number, shape, arrangement, and color of a flower’s petals to help determine its genus and species.
9. How do animals help plants survive and reproduce?
   1. Animals, such as bees, help plants survive and reproduce by playing their role in the pollination process. When animals help plants pollinate, they help spread more fertilized seeds so the plants can continue to survive for more generations.
10. Who was Tu Youyou and what was her claim to fame?
    1. Tu Youyou was a Chinese pharmacologist. She studied ancient Chinese herbal medicine and plants. She was able to use that knowledge to discover a treatment for an extremely dangerous and deadly disease called malaria.