

Nova's Botanical Brain-Teasers

Learning objective: To recall and apply knowledge of plant structure, life cycles, and the process of photosynthesis.

Join Nova the barn owl in the forest! Read each question carefully and circle the correct answer or write your response in the space provided. Good luck, young botanists!

Answer Key: 1) C, 2) True, 3) Chlorophyll, 4) B, 5) False, 6) Pollination, 7) Roots, 8) A, 9) Carbon dioxide, 10) True.

Word bank: Photosynthesis · Chlorophyll · Stamen · Pollination · Germination · Xylem · Carbon dioxide

1. 1. What is the green pigment in leaves that absorbs sunlight? A) Stomata B) Petals C) Chlorophyll* D) Roots (1 mark)

2. 2. True or False: Plants need sunlight, water, and carbon dioxide to produce their own food. (1 mark)

3. 3. What is the name of the process by which a seed begins to grow into a new plant? (1 mark)

4. 4. Which part of the flower is the male reproductive organ? A) Carpel B) Stamen* C) Ovary D) Sepal (1 mark)

5. 5. True or False: Water is transported from the roots to the leaves via the phloem. (1 mark)

6. 6. What is the name of the process where pollen is moved from the anther to the stigma? (1 mark)

7. 7. Which part of the plant anchors it in the soil and absorbs water and minerals? (1 mark)

8. 8. During photosynthesis, what gas do plants release into the atmosphere? A) Oxygen* B) Nitrogen C) Carbon dioxide D) Helium (1 mark)

9. 9. Fill in the blank: Plants take in _____ from the air through tiny holes in their leaves called stomata. (1 mark)

10. 10. True or False: Most plants reproduce by forming seeds. (1 mark)

Draw: Draw and label a cross-section of a flower, including the stamen, carpel, petals, and sepals.



Extension challenge: Nova wants to know: If a plant was kept in a dark cupboard for two weeks, what would happen to it and why? Write a short paragraph explaining your prediction.