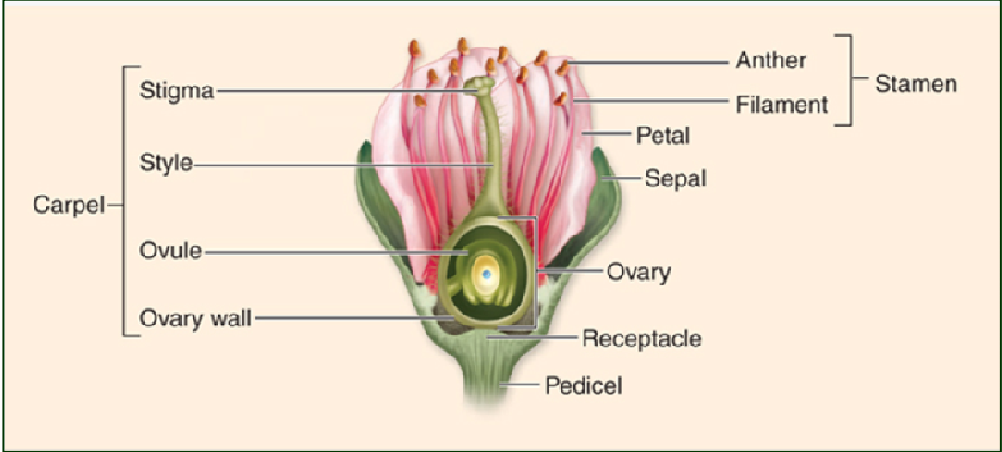


Chapter 30 – Overview of Green Plants



1. Chart the four phyla of the plant kingdom. Include common names of each and the major characteristics.

a. **Bryophytes:** _____

b. **Seedless Vascular Plants:** _____

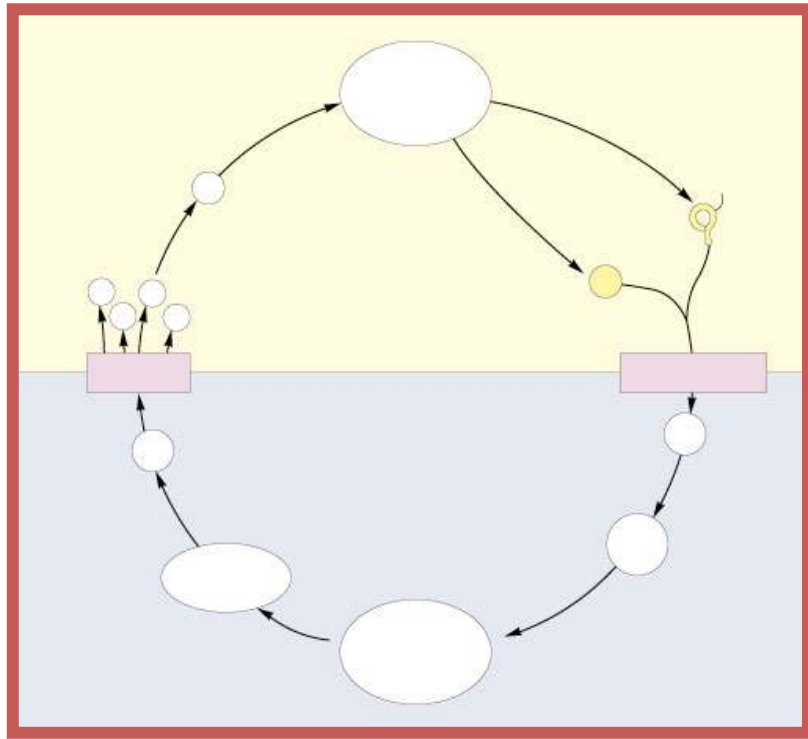
c. **Gymnosperms:** _____

d. **Angiosperms:** _____

2. What organisms are thought to be the ancestors of the land plants? What evidence supports this?

3. List several adaptations of land plants significant for terrestrial survival.

4. Explain **Alternation of Generations** in plants and distinguish it from sexual reproduction in animals. Label the generic diagram below as well.



5. Describe a few features common to **Bryophytes**.

6. What is the dominant phase of the **moss life cycle**?

7. What is the dominant phase of the **Pteridophyte (fern) life cycle**?

8. List the key adaptations of Pteridophytes (ferns) not seen in Bryophytes.

9. How is the reduced gametophyte an adaptation for seeded plants?

10. What is the significance of the **seed**?

11. What was the advantage of **pollen**?

12. Describe the four phyla of **gymnosperms**. Which is the most common?

13. Identify five differences between monocots and dicots (eudicots).

Monocots	Dicots
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.

14. What is the adaptive value of the **flower** to plants?

15. Describe the role of **ovaries** and **ovules** in the flowering plants.

16. How many sperm are in a mature pollen grain in the flowering plants? _____

17. What is the fate of each of these sperm nuclei during fertilization?

18. What is this fertilization process called? _____

19. What is the chromosome copy number (ploidy) of the endosperm? _____ How does this ploidy state come about?

20. What is the function of **endosperm**?
