

RAVEN CHAPTER 30 GUIDED NOTES: GREEN PLANTS

Raven 9th edition

1. Chart the four phyla of the plant kingdom. Include common names of each, the approximate number of species in the phylum, and the major characteristics.

a.

b.

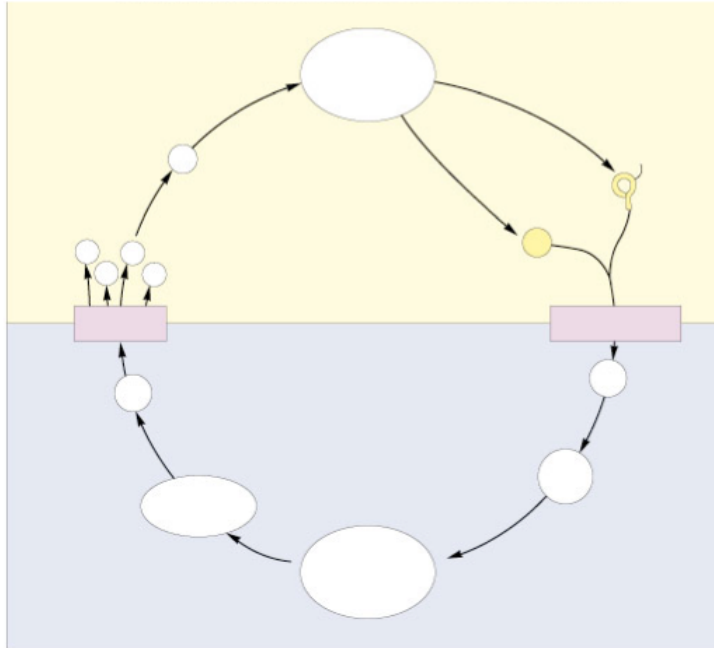
c.

d.

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.



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. List the four phyla of gymnosperms. Which is the most common?

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

1. _____
2. _____
3. _____
4. _____
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?

20. How does this ploidy state come about?

21. What is the function of endosperm?
