

Name \_\_\_\_\_

Period \_\_\_\_\_

AP Biology

Date \_\_\_\_\_

**RAVEN CHAPTER 29 GUIDED NOTES: PLANT DIVERSITY**

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.

\_\_\_\_\_

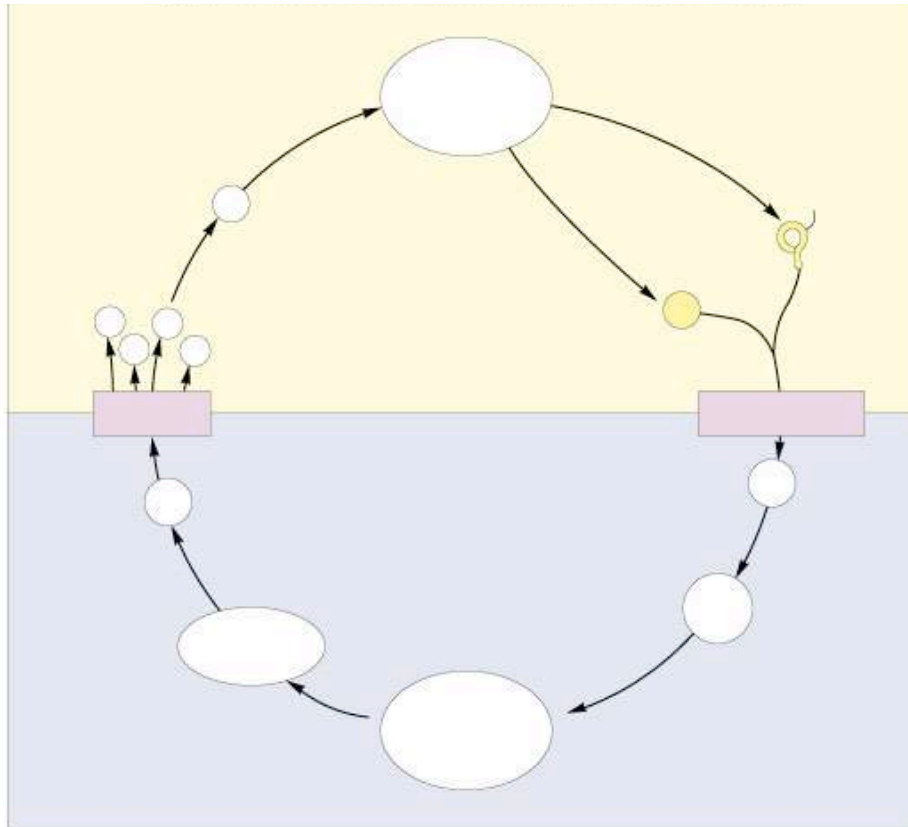
\_\_\_\_\_

\_\_\_\_\_

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

---

---

Name \_\_\_\_\_ AP Biology

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).

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

Name \_\_\_\_\_ AP Biology

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?

---

---