

## Section 22-2 Bryophytes (pages 556-559)



### Key Concepts

- What adaptations of bryophytes enable them to live on land?
- What are the three groups of bryophytes?
- How do bryophytes reproduce?

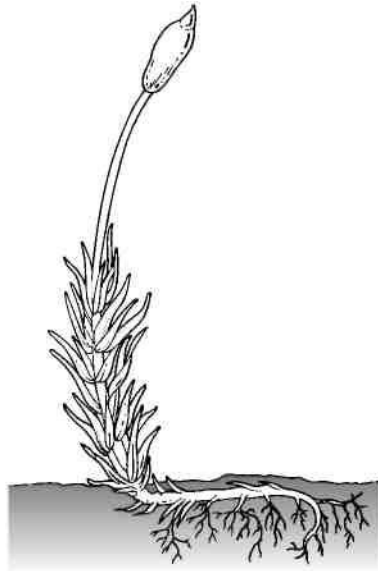
### Introduction (page 556)

1. Mosses and their relatives are generally called \_\_\_\_\_.
2. Bryophyte life cycles are highly dependent on \_\_\_\_\_.
3. How does the lack of vascular tissue keep bryophytes small? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
4. Why must bryophytes live in places where there is standing water for at least part of the year? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### Groups of Bryophytes (pages 556-557)

5. What are the three groups of plants that bryophytes include?
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
6. Where would you expect to find mosses growing? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
7. Why are mosses the most abundant plants in polar regions? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
8. Why is the thin, upright shoot of a moss plant not considered to be a true stem? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

9. Complete the illustration by identifying which part of a typical moss plant is the gametophyte and which part is the sporophyte.



10. What do the mature gametophytes of liverworts look like? \_\_\_\_\_

\_\_\_\_\_

11. What are gemmae? \_\_\_\_\_

\_\_\_\_\_

12. How do liverworts reproduce asexually? \_\_\_\_\_

\_\_\_\_\_

13. What does the hornwort sporophyte look like? \_\_\_\_\_

\_\_\_\_\_

14. In what sort of soil would liverworts and hornworts be expected to be found?

\_\_\_\_\_

\_\_\_\_\_

**Life Cycle of Bryophytes (pages 558-559)**

15. In bryophytes, which stage of the life cycle is dominant and carries out most of the plant's photosynthesis? \_\_\_\_\_

16. What fact of reproduction limits the distribution of bryophytes to habitats near water?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

17. When a moss spore germinates, what does it grow into? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

18. Complete the table about bryophyte reproductive structures.

**BRYOPHYTE REPRODUCTIVE STRUCTURES**

Structure	Description	Structure Produces
Antheridia		Sperm
	Female reproductive structure	

19. What does the zygote depend on for water and nutrients? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Human Use of Mosses (page 559)**

20. In certain environments, the dead remains of sphagnum accumulate to form thick deposits of \_\_\_\_\_.

21. Why do gardeners add peat moss to soil? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_