

Chapter 22 Plant Diversity **Section Review 22-2**

Reviewing Key Concepts

Multiple Choice *On the lines provided, write the letter of the answer that best completes the sentence.*

- _____ 1. The life cycle of bryophytes can be described as
 - a. independent of water.
 - b. dependent on water.
 - c. independent of sunlight.
 - d. dependent on seeds.
- _____ 2. Bryophytes are plants that lack
 - a. a haploid generation.
 - b. cell walls.
 - c. vascular tissue.
 - d. chlorophyll.
- _____ 3. Bryophytes transport water by
 - a. osmosis.
 - b. vascular tissue.
 - c. active transport.
 - d. transpiration.

Completion *On the lines provided, complete the following sentences.*

- 4. Three groups of bryophytes are _____, _____, and _____.
- 5. The dominant, recognizable stage of the life cycle in bryophytes is the _____.
- 6. The _____ stage carries out most of the plant's photosynthesis.

Reviewing Key Skills

7. **Inferring** Why can't a moss grow to be as tall as plants that have vascular tissue?

8. **Applying Concepts** How does the structure of a rhizoid help it to absorb water and minerals?

9. **Predicting** Why aren't bryophytes found in deserts?

10. **Applying Concepts** Describe two human uses of mosses.

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Chapter 22 Plant Diversity **Section Review 22-3**

Reviewing Key Concepts

Multiple Choice *On the line provided, write the letter of the answer that best completes the sentence or answers the question.*

- _____ 1. The function of xylem tissue is to
 - a. carry water.
 - b. carry nutrients and carbohydrates.
 - c. carry out photosynthesis.
 - d. store minerals.

- _____ 2. Plants rely on phloem tissue for the transport of
 - a. chlorophyll.
 - b. water.
 - c. nutrients and carbohydrates.
 - d. sperm and egg cells.

- _____ 3. All of the following are seedless vascular plants except
 - a. club mosses.
 - b. liverworts.
 - c. ferns.
 - d. horsetails.

- _____ 4. Coal consists of the fossilized remains of the ancestors of
 - a. club mosses.
 - b. horsetails.
 - c. ferns.
 - d. *Equisetum*.

- _____ 5. Which plants have stems containing abrasive silica crystals and are the only living genus of the phylum Arthrophyta?
 - a. ferns
 - b. lycophytes
 - c. club mosses
 - d. horsetails

- _____ 6. Which group of plants have underground stems called rhizomes and leaves called fronds?
 - a. scouring rushes
 - b. arthropytes
 - c. ferns
 - d. club mosses

- _____ 7. During the dominant stage of their life cycle, ferns are
 - a. haploid sporophytes.
 - b. diploid sporophytes.
 - c. haploid gametophytes.
 - d. diploid gametophytes.

- _____ 8. In the fern life cycle, a small, heart-shaped haploid gametophyte develops immediately after the germination of a(an)
 - a. sorus.
 - b. gamete.
 - c. egg cell.
 - d. spore.

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Reviewing Key Skills

9. **Inferring** What can you infer about the needs of ferns from the fact that they thrive on the floors of thick forests?

10. **Formulating Hypotheses** How might too much direct sunlight affect the conditions that ferns require for fertilization?
