

**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.

**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?

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

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