

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. arthropHYtes
 - 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?

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

