

**CHAPTER 25 FERNS AND GYMNOSPERMS**

**Get the Big Picture**

Only vascular plants have tissues that act as highways to move water and nutrients through the plants. There are two types of vascular tissues.

1. **Xylem:** tissue made of cells with thick walls that help to hold the plant up, and conduct water and minerals up through these cells from the roots to the leaves.
2. **Phloem:** tissue that conducts sugars made in the leaves during photosynthesis to the roots and other parts of the plant.

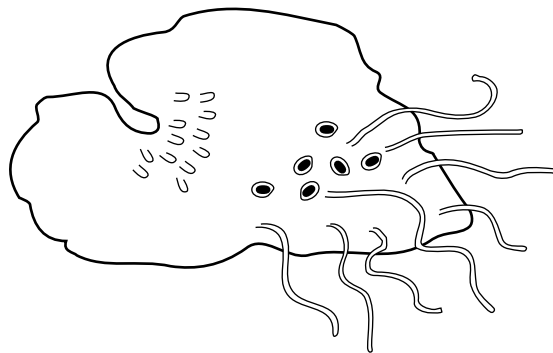
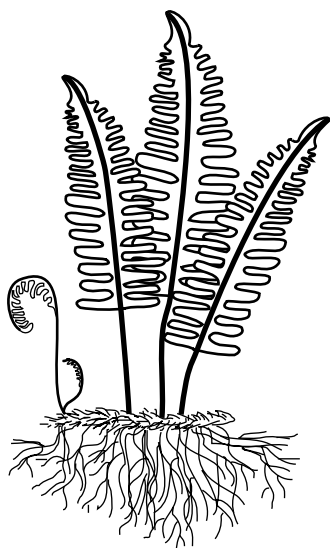
Ferns are a type of vascular plant that produce spores, not seeds. Gymnosperms, such as pine trees, are a type of vascular plant that produce seeds in cones. Both plants have two stages.

1. **Sporophyte:** looks like a typical plant with roots, stems, and leaves.
2. **Gametophyte:** includes the reproductive cells.

Look at the following pictures. Label the gametophyte stage and the sporophyte stage.

A. \_\_\_\_\_

B. \_\_\_\_\_



Each statement below goes with one of the pictures. Write the letter of each picture on the line in front of the statement it goes with.

- \_\_\_\_\_ This stage is involved in fertilization.
- \_\_\_\_\_ This stage has xylem and phloem.
- \_\_\_\_\_ The egg and sperm cells develop during this stage.