Chapter 24 Reproduction of Seed Plants

Section 24-1 Reproduction With Cones and Flowers (pages 609-616)

- C Key Concepts
 - What are the reproductive structures of gymnosperms and angiosperms?
 - · How does pollination differ between angiosperms and gymnosperms?

Alternation of Generations (page 609)

- 1. Circle the letter of each sentence that is true about alternation of generations in plants.
 - a. In all plants, the sporophyte generation is diploid.
 - b. The gametophyte in seed plants is hidden within the sporophyte plant.
 - c. The recognizable part of a seed-bearing plant is the gametophyte.
 - d. In all plants, the gametophyte generation is haploid.
- 2. An important trend in plant evolution is the reduction in the size of the ______
- 3. Where are the gametophytes found in gymnosperms and angiosperms?

Life Cycle of Gymnosperms (pages 610-611)

- 4. Reproduction in gymnosperms takes place in ______
- 5. Circle the letter of what produces cones in gymnosperms.
 - a. mature sporophyte c. pine trees
- - b. mature gametophyte
- d. pollen seeds
- 6. What kind of cone produces male gametophytes?
- 7. The male gametophytes of gymnosperms are called ______
- 8. Circle the letter of each sentence that is true about seed cones.
 - a. They produce pollen grains.
 - b. They produce female gametophytes.
 - c. They have two ovules at the base of each scale.
 - d. They are generally much larger than pollen cones.
- 9. Is the tollowing sentence true or false? Each mature female gametophyte contains hundreds of egg cells ready for fertilization.
- 10. How long does the gymnosperm life cycle typically take to complete?

Class

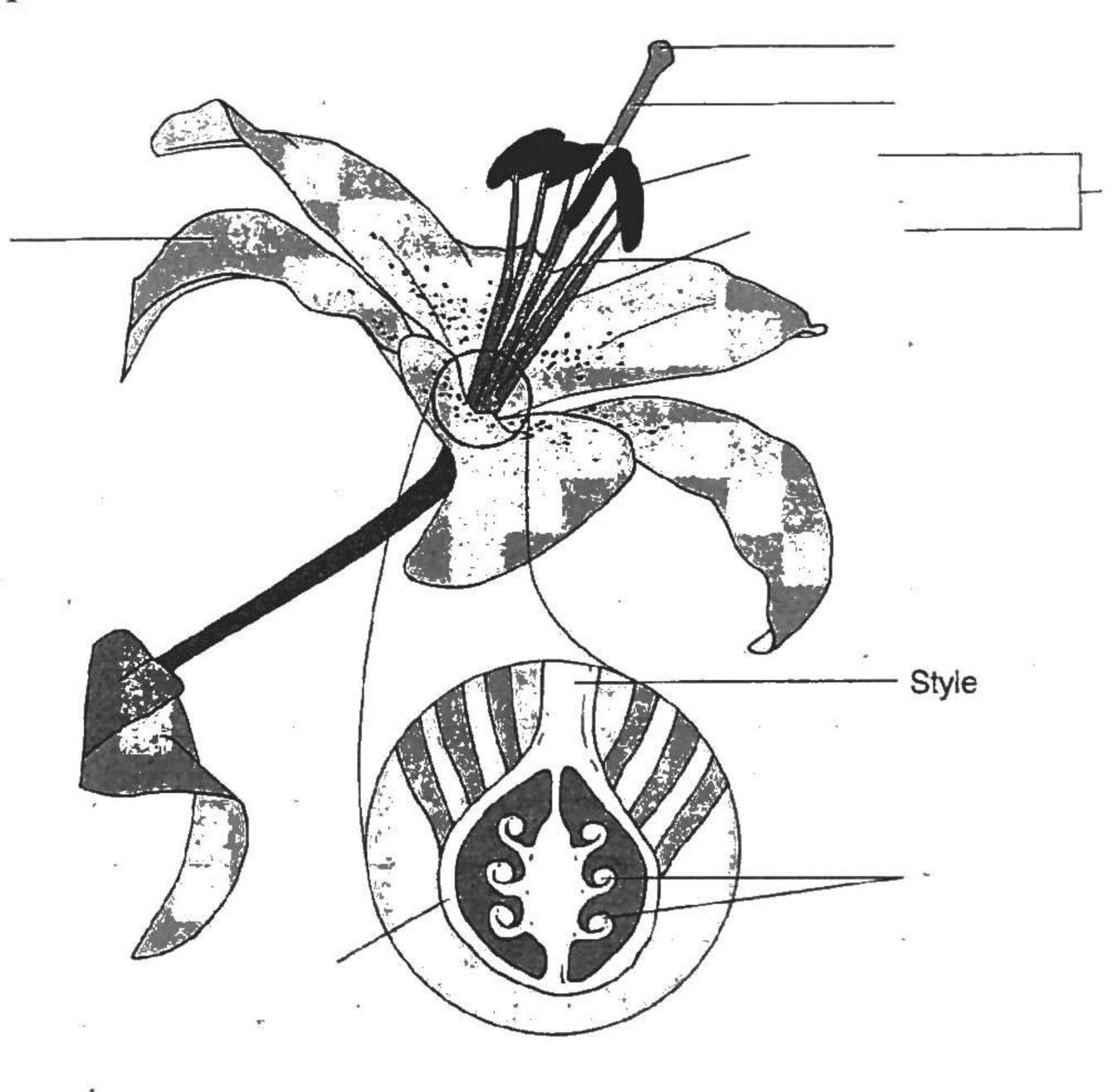
Date ____

Name

Match the floral part with its description.

Floral Part	Description
18. Sepals	a. Stalk with the stigma at the top
19. Petals	b. Structures where male gametophytes are produced
20. Stamen	c. Flower part that contains one or more ovules
21. Filament	d. Outermost, green floral parts
22. Anthers	e. Long, thin structure that supports an anther
23. Carpels	f. Innermost floral parts that produce female gametophytes
24. Ovary	g. Sticky, top portion of style
 25. Style	h. Male structure made up of an anther and a filament
26. Stigma	i. Brightly colored parts just inside the sepals

27. Label the parts of the flower on the illustration.



Class_____ Date____

Name____