



Chapter 32 Exercises

Review Questions

- In a plant's male reproductive organs, development of pollen takes place in a structure known as the _____.
 - stamen
 - microsporangium
 - anther
 - tapetum
- The stamen consists of a long stalk called the filament that supports the _____.
 - stigma
 - sepal
 - style
 - anther
- The _____ are collectively called the calyx.
 - sepals
 - petals
 - tepals
 - stamens
- The pollen lands on which part of the flower?
 - stigma
 - style
 - ovule
 - integument
- After double fertilization, a zygote and _____ form.
 - an ovule
 - an endosperm
 - a cotyledon
 - a suspensor
- The fertilized ovule gives rise to the _____.
 - fruit
 - seed
 - endosperm
 - embryo
- What is the term for a fruit that develops from tissues other than the ovary?
 - simple fruit
 - aggregate fruit
 - multiple fruit
 - accessory fruit
- The _____ is the outermost covering of a fruit.
 - endocarp
 - pericarp
 - exocarp
 - mesocarp
- A useful method of asexual reproduction for propagating hard-to-root plants is _____.
 - grafting
 - layering
 - cuttings
 - budding
- Which of the following is an advantage of asexual reproduction?
 - Cuttings taken from an adult plant show increased resistance to diseases.
 - Grafted plants can more successfully endure drought.
 - When cuttings or buds are taken from an adult plant or plant parts, the resulting plant will grow into an adult faster than a seedling.
 - Asexual reproduction takes advantage of a more diverse gene pool.
- Plants that flower once in their lifetime are known as _____.
 - monoecious
 - dioecious
 - polycarpic
 - monocarpic
- Plant species that complete their life cycle in one season are known as _____.
 - biennials
 - perennials
 - annuals
 - polycarpic

Critical Thinking Questions

13. Describe the reproductive organs inside a flower.
14. Describe the two-stage life cycle of plants: the gametophyte stage and the sporophyte stage.
15. Describe the four main parts, or whorls, of a flower.
16. Discuss the differences between a complete flower and an incomplete flower.
17. Why do some seeds undergo a period of dormancy, and how do they break dormancy?
18. Discuss some ways in which fruit seeds are dispersed.
19. What are some advantages of asexual reproduction in plants?
20. Describe natural and artificial methods of asexual reproduction in plants.
21. Discuss the life cycles of various plants.
22. How are plants classified on the basis of flowering frequency?