

HSSU – Plants and People
Study Guide - Chapter 5 – Plant Life Cycle: Flowers

Flower Structure

Sepals
Petals
Stamens
Filament
Anther
Androecium
Carpel
Pistil
Stigma
Style
Ovary
Ovule
Gynoecium

Modified Flowers

Complete Flower
Incomplete Flower
Staminate Flower
Carpellate Flower
Bract
Tepal
Perfect Imperfect
Monoecious
Dioecious
Superior Ovary
Inferior Ovary
Regular Symmetry
 Actinomorphic
Irregular Symmetry
 Zygomorphic
 Bilateral Symmetry

Inflorescences

Spike
Raceme
Panicle
Umbel
Scorpid Cyme
Sphthe and Spadix
Head
Catkin

Life Cycle

Gametes
Haploid
Zygote
Diploid
Homologous Chromosomes
Sporophyte
Gametophyte
Meiosis I
Meiosis II
Chiasma
Crossing Over
Microspore mother cell
Microspore
Pollen
Megaspore Mother Cell
Embryo Sac
Egg Apparatus
Synergids
Polar Cells
Antipodals

Pollination

Pollinators
Coevolution
Animal Pollination
Bee Pollination
Bird Pollination
Moth Pollination
Bat Pollination
Wind Pollination
Nectar
Nectaries
Nectar Guides

Fertilization

Pollen Tube
Double Fertilization
Triploid Endosperm
Embryo Development
Seed
Fruit

Discussion Questions

1. Describe the parts of a flower. Be able to label the parts on a diagram. What are the reproductive organs?
2. How are plants and flowers modified for pollination by different kinds of animals? Give some examples.
3. What is the general appearance of a wind pollinated flower?
4. Describe the important events that take place in Meiosis. How is this important for plant reproduction, variation, and evolution?
5. Discuss the kinds of modifications that can be found in different flowers with respect to flower symmetry, position of the ovary, and fusion of parts.
6. What are some mechanisms that promote outcrossing in flowers? Why is this often important?
7. What kind of reward do plants offer to their pollinators? How do humans take advantage of these rewards? Give examples.