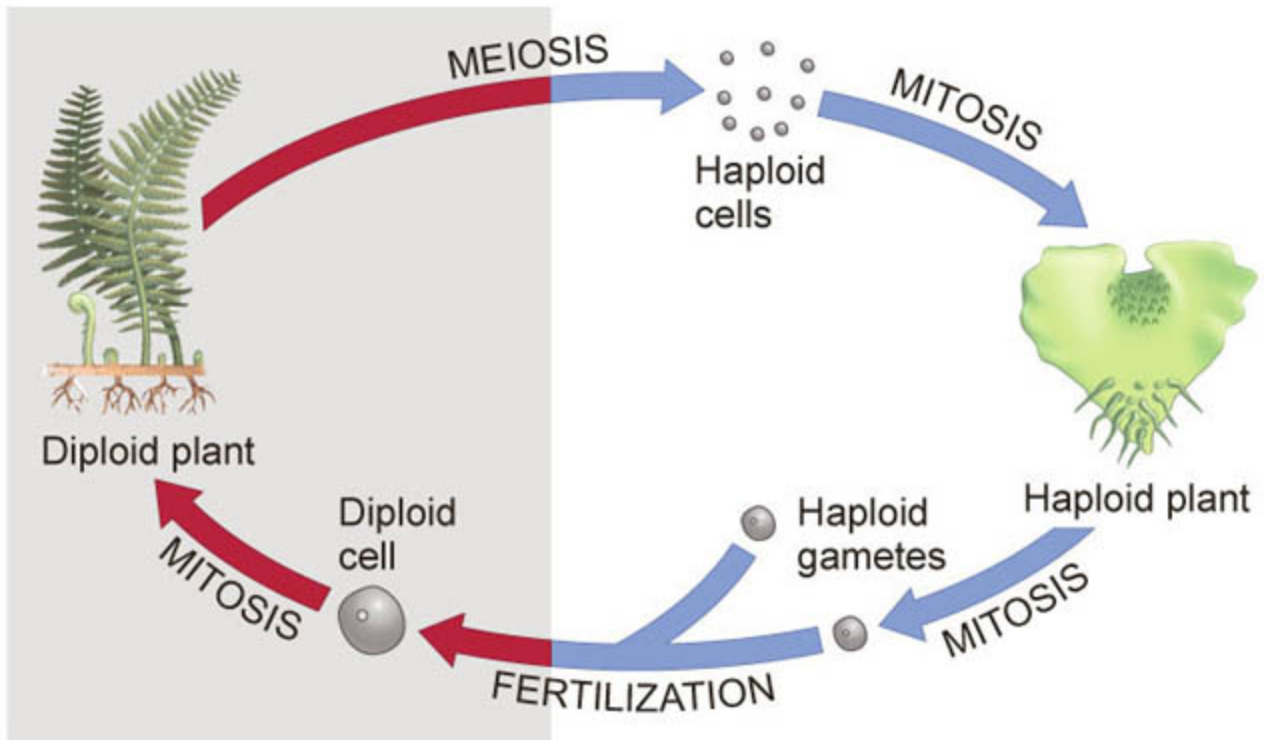


Plant Notes

Chapter 22 Section 1: Introduction to Plants

1. What are the characteristics of a plant?
 - a. Kingdom:
 - b.
 - c.
 - d. cellulose
 - e.
 - f. chlorophyll
 - g.
 - h. seeds or spores
2. List the 3 features that are used to categorize plants.
 - a.
 - b.
 - c.
3. What are the 4 things plants need to survive?
 - a.
 - b.
 - c.
 - d.
4. Early plants depended on _____ for their life cycles.
5. Alternation of Generations
 - a. sporophyte
 - b. gametophyte



Chapter 22 Section 2: Bryophytes

1. Bryophytes depend on _____ water for reproduction.
2. The sperm producing structure is the _____.
3. The egg producing structure is the _____.
4. These plants are small and can draw up water by _____ only a few _____ above the ground.
5. The most common bryophyte is the _____.
6. What are the two functions of rhizoids?
 - a.
 - b.

Chapter 22 Section 3: Seedless Vascular Plants

1. What is the function of vascular tissue?

Types of Vascular Tissue	
Structure	Function
Xylem	
Phloem	

2. How do ferns reproduce?
3. What is a fern "leaf" called?
4. List 2 relatives of ferns.

Chapter 22 Section 4: Seed Plants

1. What are the seed-bearing structures of gymnosperms?
2. What are the seed-bearing structures of angiosperms?

Structure	Function
Seed	
Embryo	
Seed Coat	

3. Why was the development of seeds important for land plants?
 - a.
 - b.

4. List the 4 groups of gymnosperms.
 - a. _____
 - b. _____
 - c. _____
 - d. _____
5. Gymnosperm seeds are called exposed or _____.

Chapter 22 Section 5: Angiosperms-Flowering Plants

1. The reproductive organs of an angiosperm is a _____.
2. Angiosperm means _____.
3. Flowers contain _____ which surround and _____ the _____.
4. The ripe ovary is a _____.
5. How does fruit help in the dispersal of seeds?
 - a. _____
 - b. _____
6. What percent of all plant species produces flowers?
7. List 3 adaptations that help attract pollinators.

Classes of Angiosperms		
	Monocot	Dicot
Cotyledons		
Number of Flower Parts		
Leaf Veins		
Arrangement of Vascular Bundles		
Example		

Plant Life Spans	
Annual	
Biennial	
Perennial	

Chapter 23 Section 1: Specialized Tissues in Plants

1. Functions of Roots

a.

b.

c.

d.

e.

2. Functions of Stems

a.

b.

c.

3. Functions of Leaves

a.

b.

c.

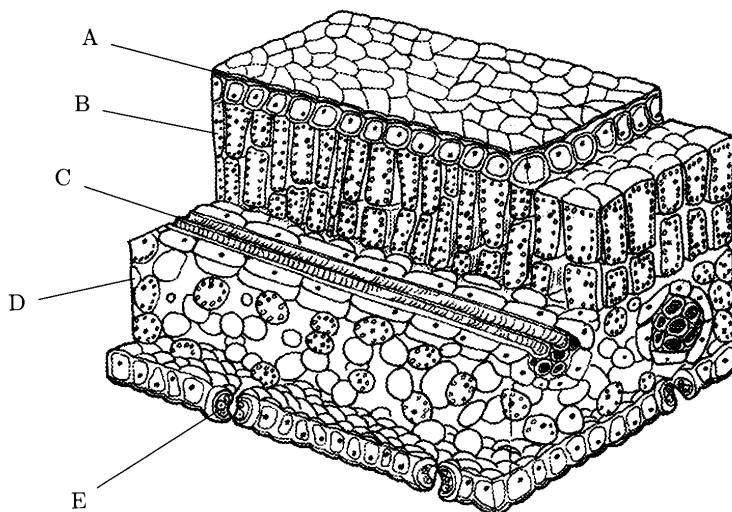
d.

Chapter 23 Section 2: Roots

1. Types of Roots
 - a. Taproots:
 - b. Fibrous Roots:
2. What is the function of root hairs?
3. What is the function of the root cap?

Chapter 23 Section 4: Leaves

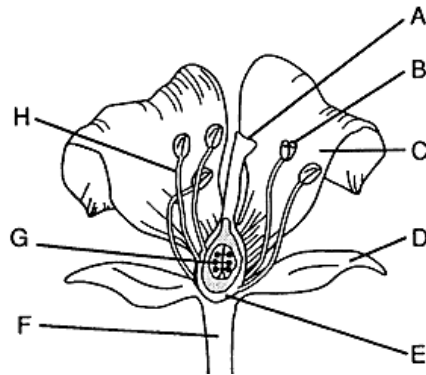
Leaf Structures	
Structure	Function
Cuticle (A)	
Palisade (B) and Spongy (D) Mesophyll	
Vascular Bundle (C)	
Stomata	
Guard Cells (E)	



1. What is transpiration?

Chapter 24 Section 1: Reproduction with Cones and Flowers

Why Seeds?	
Protection	
Nourishment	
Dispersal	
Delayed Growth	



Flower Part	Letter(s)	Function
Sepal		
Petal		
Stamen		
Carpel/Pistil		
Ovary		
Ovule		
Stem		

1. What is pollination?
2. What is fertilization?

Chapter 24 Section 2: Seed Development and Germination

3. Describe the seeds for each dispersal method below.
 - a. wind
 - b. animals
 - c. water
4. What is the benefit to animal pollinators?
5. Which method, wind or insect, is more efficient? Why?
6. What is dormancy?
7. What is the benefit of dormancy?
8. What is germination?

Chapter 25: Plant Responses and Adaptations

9. Describe the leaf adaptations of the following plants.
 - a. cactus
 - b. pea plant
 - c. carnivorous plant

Plant Responses		
	Responds to	Example
Phototropism		
Gravitropism		
Thigmotropism		