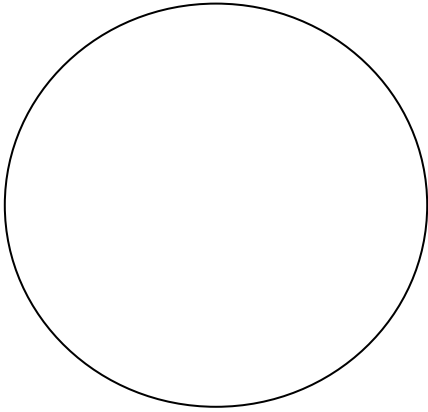


# Structures of Plants

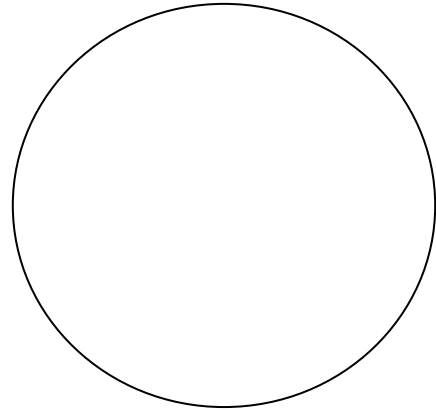
## **Label all slide tissues**

Magnification \_\_\_\_\_



Typical Plant Root (Monocot slide)

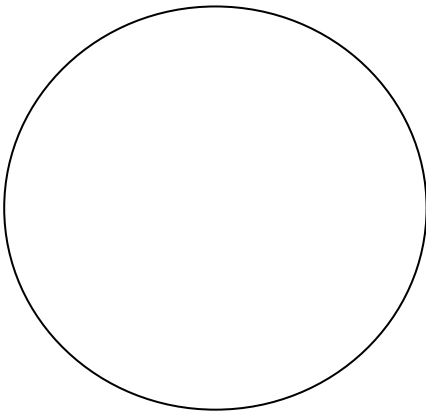
Magnification \_\_\_\_\_



Typical Plant Root (Dicot slide)

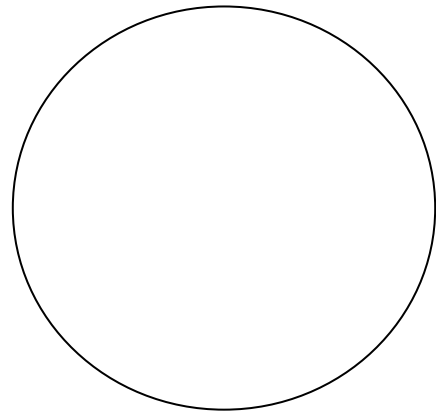
## **Briefly compare and contrast monocot and eudicot roots**

Magnification \_\_\_\_\_



Typical Plant Stem (Monocot slide)

Magnification \_\_\_\_\_

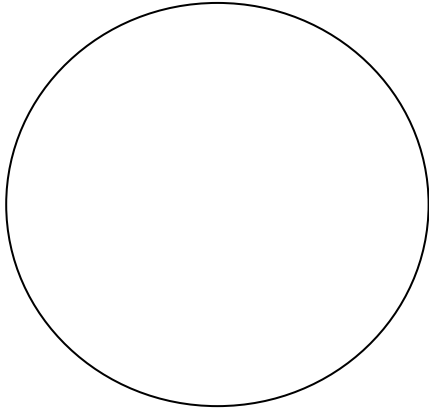


Typical Plant Stem (Dicot slide)

## **Briefly compare and contrast monocot and eudicot stems**

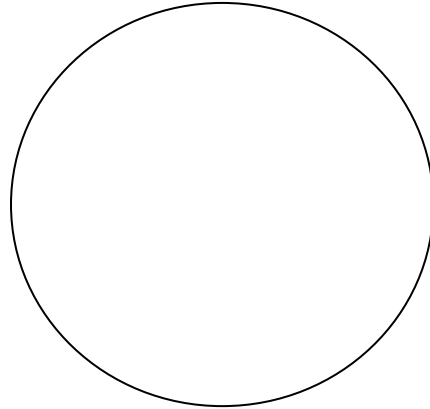
# Structures of Plants

Magnification \_\_\_\_\_



Typical Plant Leaf (Monocot slide)

Magnification \_\_\_\_\_



Typical Plant Leaf (Dicot slide)

## **Briefly compare and contrast monocot and eudicot leaves**

### **Questions from text**

1. List the traits that enabled plants to adapt to life on land.
2. Identify the role of each generation in the alteration-of-generations life cycle.
3. List the characteristics that allowed bryophytes to colonize land.
4. Explain how xylem contributes to an upright body plan.
5. Compare and contrast microphylls and megaphylls.

## Structures of Plants

6. Identify the key components of gymnosperm and angiosperm life cycles.

List key features of Monocots and Eudicots

<b>Feature</b>	<b>Monocots</b>	<b>Eudicots</b>
Number of seed leaves		
Flower parts		
Pollen grain		
Type of stem		
Leaf vein pattern		
Vascular bundle pattern in stem		
Type of roots		

7. How do plants obtain their minerals from the soil?

## Structures of Plants

8. What is the purpose of the Casparian strip in plants?

### Compare Xylem and Phloem

<b>Feature</b>	<b>Xylem</b>	<b>Phloem</b>
Substance being moved		
Direction of movement		
Characteristics of tissue		
Types of Cells		

9. What environmental factors might cause a plant to lose turgidity?

10. What is guttation?

# Structures of Plants

## Describe plant hormones and effects

<b>Hormone</b>	<b>What it does</b>	<b>Commercial Use</b>
<b>Auxin</b> (indoleacetic acid- IAA)		
<b>Gibberellins</b> (gibberellic acid- GA <sub>3</sub> )		
<b>Cytokinins</b> (zeatin)		
<b>Abscisic acid</b> (ABA)		
<b>Ethylene</b>		

11. Describe three types of tropisms:

-Phototropism:

-Thigmotropism:

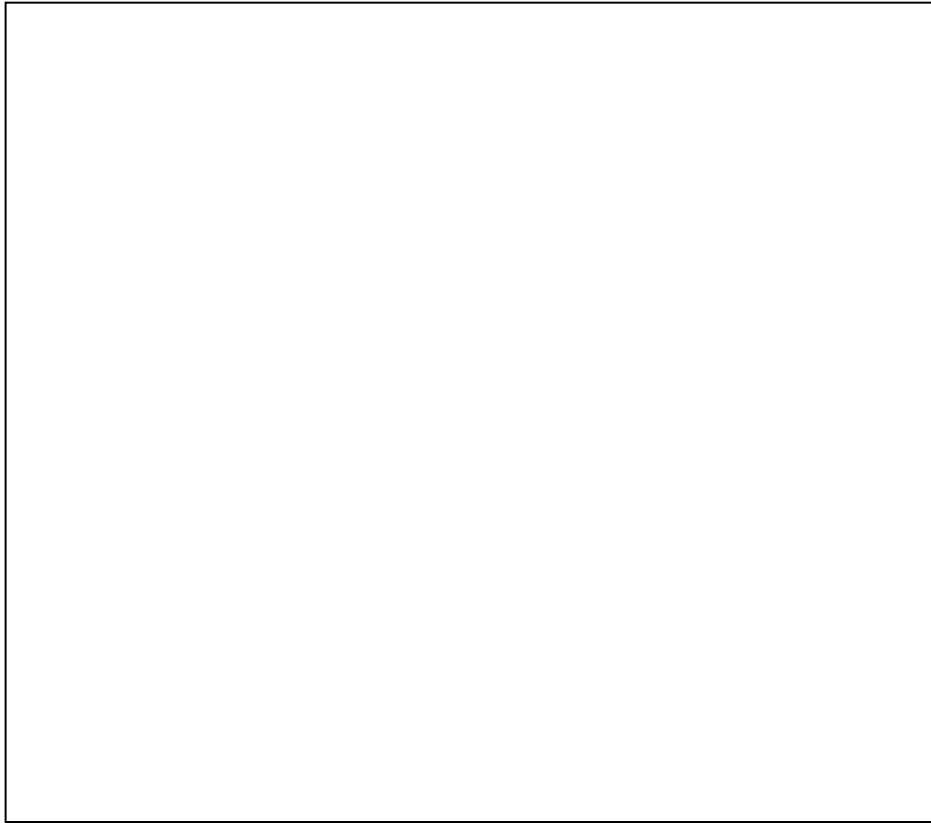
-Gravitropism:

12. What are Phytochromes?

13. How do Phytochromes affect plant growth and flowering?

# Structures of Plants

Diagram and label a complete flower



**Describe the purpose for each flower part:**

-sepals:

-carpal:

-petals:

-style:

-stamens:

-stigma:

-filament:

-ovary:

-anther:

-ovule: