

Name: _____ Period: _____

Lab 24: Flower Dissection

Intro:

Flowers are the reproductive organs of the shoot system in a flower plant. Both the male and female sex cells are produced within the structures of a flower to create progeny in the form of seeds. You will investigate this plant structure by completing a dissection of a flower and compare the structures found in this reproductive system to that of animal reproductive systems.

Materials:

Forceps
Scalpels
Scissors
T-Pins

Dissection needles
Hand lens
Dissecting Tray
Ruler

Specimen:

Stargazer Lily Flower
Kingdom: Plantae
Order: Liliales
Family: Liliaceae

Genus: *Lilium*
Species *stargazer*

Procedure:

- Carefully examine your whole flower when you receive it. Compare your fresh flower structure to the diagram.
- Answer the questions listed under A and B.
- Carefully push aside the sepals and petals to see the style with the stigma on top. Use a scalpel to carefully slide down the middle of the style and through the ovary of the flower. You should be able to splay open the cut flower.
- Use the dissecting needle and hand lens to investigate the parts of the flower
- In the "diagram" space, draw your flower specimen and LABEL it correctly using the given diagram.
- Answer questions listed under C and D.
- When you are done, clean up as instructed and answer the analysis.

Observation Questions:

<p>A. Sepals:</p> <ol style="list-style-type: none"> Number present? _____ Color? _____ Location? _____ Function? _____ _____ 	<p>B. Petals:</p> <ol style="list-style-type: none"> Number present? _____ Color? _____ Location? _____ Function? _____ _____
<p>C. Stamen:</p> <ol style="list-style-type: none"> Is this the male or female part? _____ Number present? _____ Location? _____ Name the 3 parts of this organ: _____ What is released from this structure? _____ Carefully remove one stamen from your flower. <ol style="list-style-type: none"> Break open one anther. What is inside? _____ Describe (shape, color, texture) what is inside: _____ Which sex cell is the pollen? _____ 	<p>D. Pistil:</p> <ol style="list-style-type: none"> Is this the male or female part? _____ Number present? _____ Location? _____ Name the 3 parts of this organ: _____ Feel the stigma. Describe its texture. _____ What advantage does the stigma's feeling or texture give the plant? _____ What gamete is inside the ovule? _____ What is a ripened/enlarged ovary called? _____

Analysis Questions:

1. What is the function of a flower? How does this function relate to the functions ovaries and testes in an animal?

2. What structures are similar between a flower and an animal's reproductive structures?

Diagram of Specimen:

Draw a picture of your dissected flower. Identify the type of flower you dissected and label all structures.

Flower Type Dissected _____



