

## FLOWER LAB

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Name \_\_\_\_\_

Period \_\_\_\_\_

### A. OBSERVE and IDENTIFY: ✓X as you go.

Your flower's name: \_\_\_\_\_

1. Study **FLOWER diagrams**, including this one.

The OVULES are found \_\_\_\_\_ the \_\_\_\_\_.

2. **DO NOT Dissect or damage YOUR FLOWER YET.**

**Circle** the parts as you find them in **your flower...**

**without removing.** 1) petal, 2) sepal, 3) stamen,

4) anther, 5) filament, 6) pistil (or carpel), 7) stigma, 8) style, 9) ovary, 10) ovules

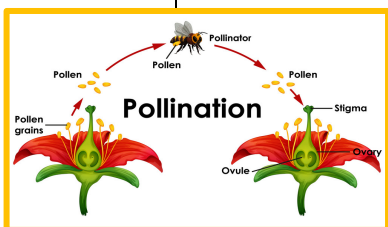
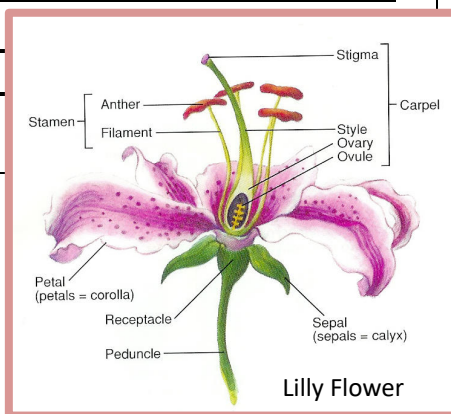
3. **DO NOT REMOVE anything. PLAN only.**

**Plan** how to remove ONLY enough parts of your flower so your

**flower looks similar to the Basic Complete Flower Anatomy Diagram**

4. **List** the names of the parts that you **cannot** see (**without dissecting**).

**Have Checked..**



### B. POLLEN and POLLINATION:

In flowering plants, pollen carries the male sperm cell to the female stigma.

Fertilization of an egg by the sperm cell is needed for an embryo & seed to form.

#### Animal Pollinators:

1. Flowers that attract pollinators with color and/or odor, usually need **animal pollinators**.

#### Wind or Gravity Pollination:

2. Flowers that have pollen above the stigma can be pollinated by **wind and/or gravity**.

#### Pollination of YOUR FLOWER?

3. Is the anther (and POLLEN) in **your flower** above or below the stigma? \_\_\_\_\_

\_\_\_a) If the pollen is formed above the stigma, it can fall by gr \_\_\_\_\_  
or be carried by w \_\_\_\_\_ to the stigma, such as in corn or grass. →

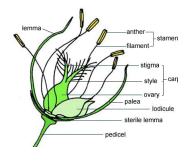
\_\_\_b) If the pollen is formed below the stigma, or on a different flower,  
it needs something to carry pollen to the stigma

\_\_\_c) Most flowers are structured so that most pollen is taken to a different flower,  
or plant, which helps mix traits, called var \_\_\_\_\_. **Variation** helps  
the plant survive if there is a/an \_\_\_\_\_ change.

\_\_\_d) Animals pollinate flowers by accident as they gather food.

\_\_\_e) Some flowers need specific pollinators. Alfalfa does better with Alkali Bees.

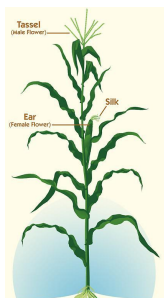
4. How do you think **your flower** would be pollinated? Why?



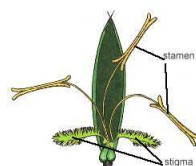
Honeysuckle Flower



Cactus Flower



Corn ♀ & ♂ Flowers



Grass Flower

5. ← Label the flowers **at left** as to how they are pollinated, wind or animals.

6. Do you see pollen? \_\_\_\_\_ (If time, ASK, and look at some pollen with a microscope.)

7. The stigma is usually sticky. Cut or tear a tiny (**this size** → □) piece of tissue paper.

See if it will stick to the stigma. \_\_\_\_\_

**Have Checked..**

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### C. Flower DISSECTION: ✓X as you go.

1. Safety Rules to use a tweezers or scissors.

\_\_\_ → Dissecting scissors have very sharp points.

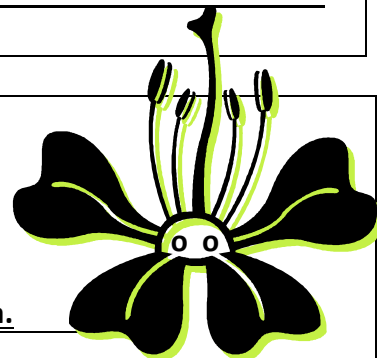
\_\_\_ → DO NOT use points except for dissections.

\_\_\_ → Protect Scissor points with black stopper.

\_\_\_ → Return all dissecting equipment to bag & marked area.



\_\_\_ → → SIGN your name that you agree. \_\_\_\_\_



2. Carefully, **remove only the front or side parts** of your flower to show all of the parts. **It should look similar to the image above 7.**

3. Use a dissecting scissors to dissect the ovary to show OVULES.

4. Have your **DISSECTION CHECKED** here **before you draw.** \_\_\_\_\_

### D. FLOWER DRAWING: ✓ as you go...

1. Use **SCIENTIFIC DRAWING RULES\*\*** and a whole blank sheet of white paper to draw the dissected view of your flower...as large as your hand.

\*\* 1. Draw part for part (count).

\_\_\_ 2. Use single solid lines.

\_\_\_ 3. Do NOT sketch or shade.

2. **DO NOT LABEL yet.** Have **CHECKED** before you label it. \_\_\_\_\_

### E. Flower LABELS: ✓ as you go.

1. Use a ruler or straight edge to label. Label lines must touch the part they label.

2. Label the **male parts on one side.** Add the male symbol. ♂

3. Label the **female parts on the other side.** Add the female symbol, ♀

4. **Add a short description of the Function for each part.** Have Checked. \_\_\_\_\_

### F. FLOWER MICROPHOTOGRAPH (A photo taken with a microscope)

**Macro-photo (An enlarged-photo) Ask!** \_\_\_\_\_

1. See **Google Classroom** for the assignment. **Use Page 1 for your macro-photo.**

2. You may choose any flower, but **ASK** before you take it.

3. Your macro-photo (enlarged) photo must be an identifiable flower part and in focus.

You may need help to "take" or "click" the photo as you select, magnify and focus.

4. Store photos on your Google Classroom document. Save Page 1 for the assignment.

5. Photos you need: a) a magnified identified flower part photo and

b) a photo of the whole flower.

6. BE SURE your photos are IN FOCUS and labeled with a) Flower Name,  
b) Flower Part Name and  
c) Your Name + Year

7. Do not turn in. \_\_\_\_\_ Have Checked \_\_\_\_\_

Add your name to the **Photos for Framing** list.

**G. ASK! More Points** if your photo is chosen for the Bulletin Board!!

