# Pre-Lab Information

Purpose Use a virtual lab to explore the anatomy of a flower using a laboratory procedure.

Time Approximately 45 minutes

Question How can dissection be used to investigate the anatomy of a flower?

Summary Most flowers are able to reproduce sexually. Some flowers contain only male or female structures and need the help of pollinators, such as bees and butterflies, to reproduce. Other flowers can self-pollinate because they contain both male and female structures in the same flower. A flower’s reproductive structure determines which way it is able to be pollinated. In this lab, you will dissect a flower to study its reproductive structures. You will make sketches and describe the role each structure has in the reproduction process.

# Lab Procedure

1. Select **Forceps** from the **Tools**, and then remove the petals. Record the number of petals in Table A of the Student Guide. Select **Continue** when done.
2. Use the forceps to remove the stamen. Record the number of stamen, anthers, and filaments in Table A of the Student Guide. Select **Continue** when done.
3. Use the forceps to remove the pistil. Record the number of pistils, stigmas, styles, and ovaries in Table A of the Student Guide. Select **Continue** when done.
4. Draw a petal, stamen, anther, filament, pistil, stigma, style, and ovary in Table A of the Student Guide. Select **Continue** when done.
5. Select **Ruler** from the **Tools** to measure the petal, anther, filament, pistil, and ovary. Record these measurements in Table A of the Student Guide. Select the **Magnifying Lens** to read the ruler. Select **Continue** when done.
6. Select **Scalpel** from the **Tools**. Drag the scalpel to point A. To dissect the pistil, drag the scalpel to point B. Select **Continue** when done.
7. Select **Magnifying Lens** to view the ovules. Draw the ovules in Table B of the Student Guide. Select **Continue** when done.
8. In Table A and Table B of the Student Guide, write the reproductive function of each part of the flower. You can use your vocabulary words to help you.
9. Recreate the path of the pollen from anther to ovule.

# Data

Record your data either in your lab notebook or in the space below.

**Table A**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Part** | **Number of Parts** | **Drawing** | **Length****(cm)** | **Reproductive Function** |
| Petals |  |  |  |  |
| Stamens |  |  |  |  |
| Anthers  |  |  |  |  |
| Filaments |  |  |  |  |
| Pistils |  |  |  |  |
| Stigmas |  |  |  |  |
| Styles |  |  |  |  |
| Ovaries |  |  |  |  |

**Table B**

|  |  |  |
| --- | --- | --- |
| **Part** | **Drawing** | **Reproductive Function** |
| Ovules |  |  |