BUD BURST

BACKGROUND

Flowers are often grown for their beauty and fragrance, but the a flower's beauty and fragrance is not just aesthetically pleasing, it is a reproductive adaptation for the plant. Flowers attract bees, wasps, butterflies, and other insects which carry pollen from one plant to the next. This process is necessary so the plant can produce fruit, which produces seeds from which new plants grow. In this activity, you will dissect a flower to explore anatomy, one particular flower shape (below) is easily dissected.

MATERIALS

- Flower
  Suggested: Hibiscus or Hibisceae

- Tweezers
- Eye Protection
- Magnifying Glass
- Paper Towel
- Gloves (optional)

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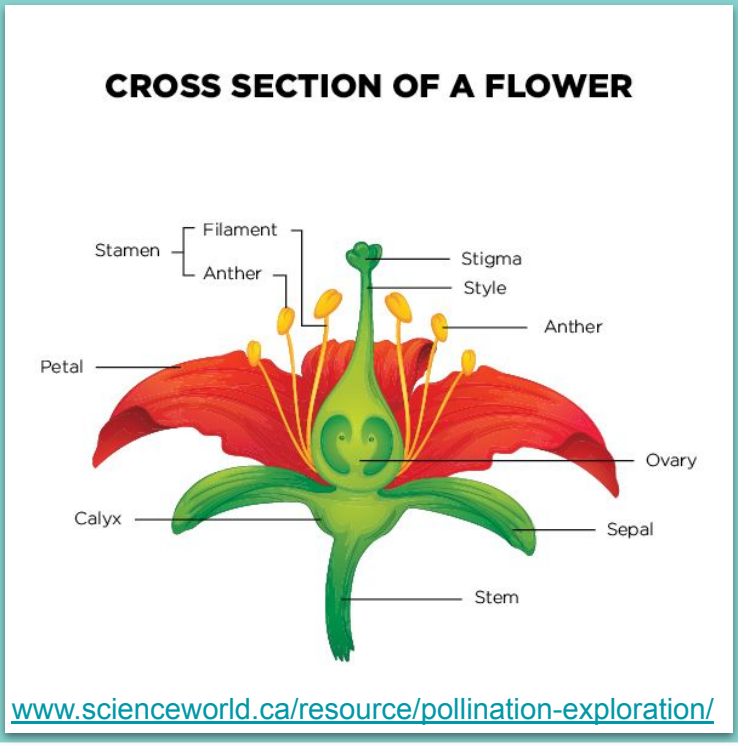
INTRODUCTION

In a flower dissection the following are the main structures to identify, please consider how the form of these structures may influence their function:

- **Sepals - These are modified leaves that protect the flower in bud and support the petals when in bloom.**
- **Ovary/Ovules - The ovary is the female reproductive part of the flower. The ovary contains ovules, which develop into seeds upon fertilization. The ovary eventually becomes fruit.**
- **Petals - These are modified leaves that surround the reproductive parts of a flower. They attract pollinators, such as bees or bats.**
- **Anthers - These are part of the male reproductive section of the flower and produce pollen.**
- **Pollen - Pollen is needed to fertilize the ovules and create seeds for the plant.**
- **Pistil - This helps in the transfer of pollen from flower to flower, in addition to helping fertilize the ovules.**



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PROCEDURE

Step 1: Place your flower on a paper towel to examine the flower's base for the sepals. Sepals are the green, leaf-like structures outside the petals that protect the flower when it's in the budding phase.

Step 2: Grasp the sepals with tweezers and pull them back to expose the full length of the petals and the ovary underneath.

Step 3: Remove each petal with a pair of tweezers or your fingers. Set aside.

Step 4: Now you have the exposed style. Use the tweezers to open the style.

Step 5. The round structure inside the style is the ovary. The ovary contains ovules that are the part of the plant that will eventually develop into fruit!

Step 6. Locate the anther of the flower. The anther is the bulb-like structure on the end of a long filament. Anthers contain pollen. Use your magnifying glass to examine pollen grains on the anthers.

Step 7. The stamen of the flower is the anther and the long filament attached to it. The stamen helps with pollen production and plant reproduction. Remove the stamen with tweezers to reveal the pistil in the center of the flower.

Step 8. The pistil is the large long structure left on your flower. The pistil is also part of the reproductive process, And helps with the transfer of pollen from flower to flower.