



Explorations in Agriculture

# Flower Power

Students observe the physical characteristics of flowers. This knowledge creates the foundation for understanding pollination.

## Supplies Needed

- Cut flowers. Contact a local florist and ask if they have old flowers they will be discarding. A variety of colors, sizes, and types of flowers is suggested. Examples include: lilies, tulips, roses.
- *Flower Power Worksheet* (Resource A)
- Clear tape
- Cardstock or cardboard pieces
- Dissected flower with parts labeled. **This needs to be done by the teacher/instructor before class.**



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## Activity

1. Give each group member a copy of the *Flower Power Worksheet* (Resource A). Use the glossary of terms to label the flower parts.
2. Look at the previously dissected flower. Students work in pairs or individually to dissect a flower. Please use a “light touch”, rough handling of the flower will destroy the parts that need to be labeled.
3. Students carefully dissect their flower and tape the parts onto the cardstock paper. Label the flower parts.



## Classroom Connections

**English-Language Arts** – Form groups of three or four students and discuss the following questions:

- Are some flowers easier to dissect than others?
- Were some parts easier to identify than others?
- Did every flower contain pollen? Why or why not?
- How do you think your flower is pollinated?
- Can you predict the size and shape of the seeds that may be produced by the flower based on how the flower looks?

After discussing and recording their responses to each question, one representative from each group should share with the class, their group’s answers to one of the questions.

## Academic Standards

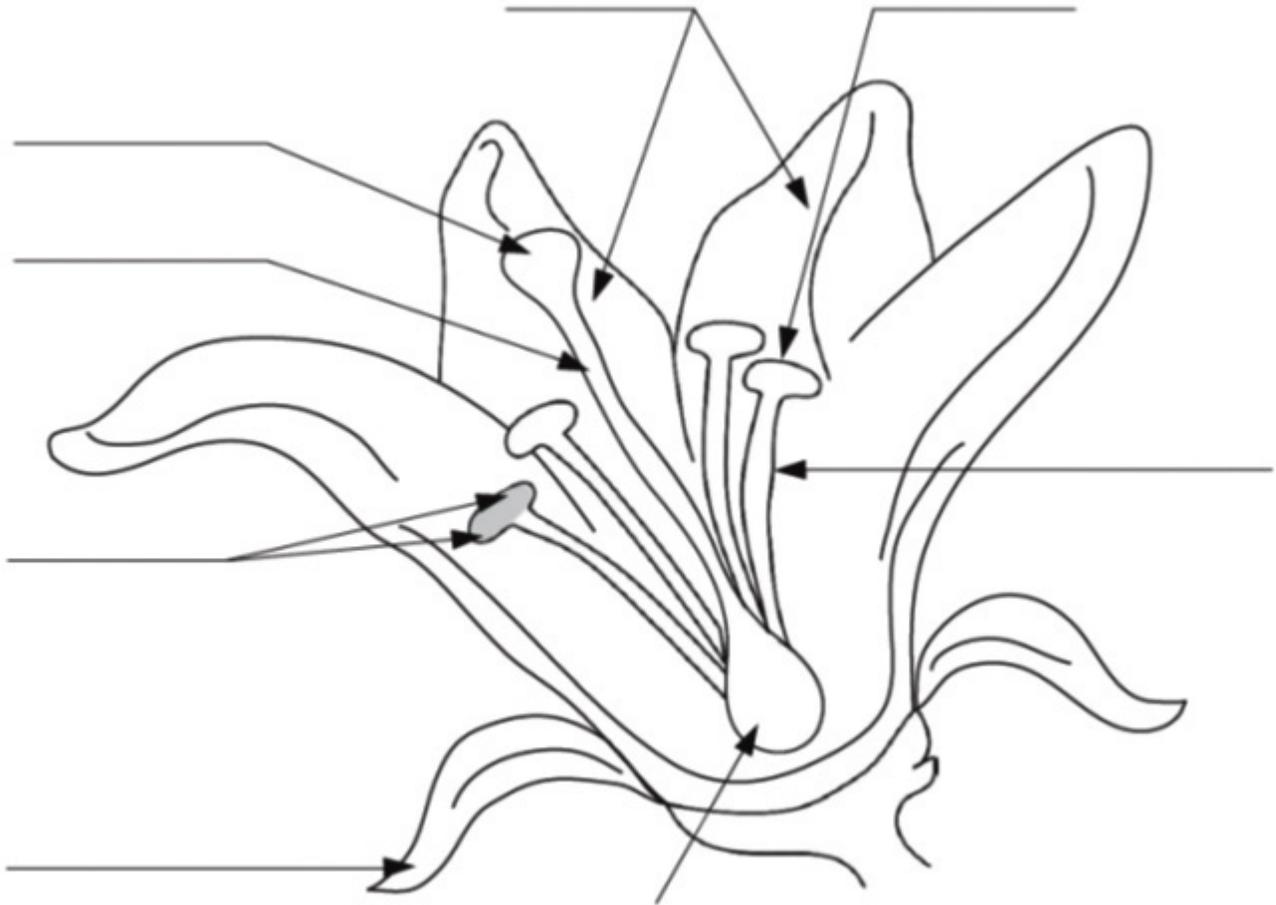
### Minnesota K-12 Standards and Benchmarks

- 2.4.1.1.1 Describe and sort plants into groups in many ways, according to their physical characteristics and behaviors.
- 2.4.3.1.1 Describe the characteristics of plants at different stages of their life cycles.

## Additional Resources

- [www.extension.umn.edu/garden/landscaping/implement/soil\\_ph.html](http://www.extension.umn.edu/garden/landscaping/implement/soil_ph.html)
- [www.walmart.com/tp/ph-test-strips](http://www.walmart.com/tp/ph-test-strips)

## Flower Power Worksheet



### Glossary of Flower Parts

**Petals** – the colorful, thin structures that surround the pollination parts of the flower.

**Sepal** – commonly green, leaf-like structures that protect the bud prior to opening.

**Anther** – the bright sac that produces and contains the pollen grains.

**Filament** – the stalk that supports the anther.

**Pollen grains** – the powdery particles that contain the male portions of the flower; also a nutritious protein-rich food for bees.

**Stigma** – sticky surface where the pollen lands and eventually travels down toward the ovary.

**Style** – the narrow region of the pistil between the stigma and the ovary.

**Ovary** – the base of the female portion of the flower containing the seeds.

*The **Stamen** or male part of the flower includes the anther and filament.*

*The **Pistil** or female part of the flower includes the stigma, style, and ovary.*