

# Xanthus'



## Design a Flower

# Hummingbird

### Objectives

- Design a flower

### Tools of Maturity

- Intellect

### Benchmarks

- Knows that each plant has different structures which serve different functions in growth, survival, and reproduction (Science 6, Level II)

### Skills for Living

- Creativity

### Materials

- A variety of different types of flowers—1 per student; Design a Flower (Copy Master, page 35)—1 per student; plain white paper for flower pictures—1 per student; crayons, colored pencils, or markers

### Awaken Enthusiasm



Pass out one flower to each student.

### Focus Attention



Divide students into pairs, making sure that each partner has a different type of flower. Ask students to discuss with their partners the similarities and differences between their flowers. Tell the class that all flowers have some parts in common even though they may look very different from species to species. Give each student a copy of Design a Flower and go over the parts of a flower, referring to the diagram. Have students locate the parts on their own flower.

### Direct Experience



Tell the students that plants and animals often “work together” to get their needs met. For example, a flower wants to get pollinated and a hummingbird wants to get nectar. The hummingbird’s bill is well adapted to reach into the center of a flower. Its long tongue moves rapidly to sip the flower’s nectar. In the process of sipping, the hummingbird picks up pollen from the flower and distributes it to the next flower from which it sips. The flower seems perfectly designed to suit the hummingbird. Tell the students that they are going to design a new flower. First they should answer all of the questions on the Design a Flower page so that they really take time to think about their flower. Then they can draw and color a picture of what their flower looks like.

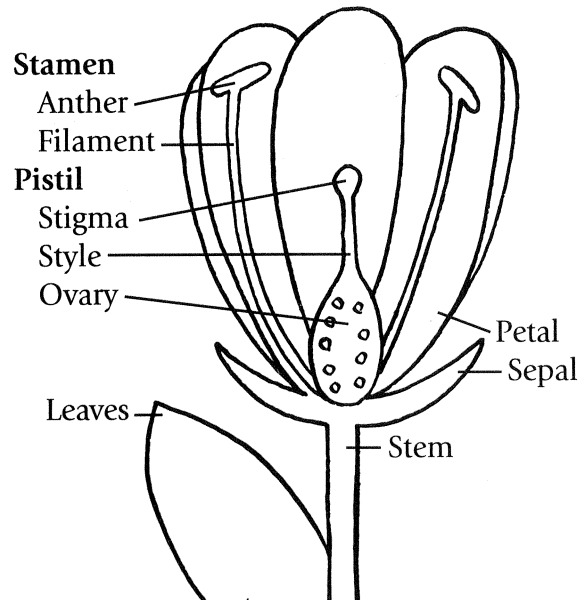
### Share Inspiration



Put up all of the flower pictures for the class to admire. Have students try to figure out how each flower is pollinated.

**Extension:** Have students make 3-D versions of their flowers using craft supplies such as colored tissue paper, pipe cleaners, construction paper, etc.

## Design a Flower



Where does your flower grow? (country or region of the world, type of climate, type of soil, elevation)

When does your flower bloom? (season, time of day)

How long do your flower's blooms last?

What color(s) is your flower?

Does your flower have a fragrance? Describe it.

How does your flower get pollinated? (bird, butterfly, moth, wind)

What is the size and shape of the flower, its leaves, its stem, its seeds?

Is your flower an annual (seeds need to be planted each year) or a perennial (continuing to live from year to year)?

**Copy Master**