



Figuring out Flowers

April showers bring May FLOWERS!

Today is May 1st and there is no better day to start talking about flowers! Right now, it's spring and the Umpqua is teeming with beautiful flowers. Maybe when you walk around your neighborhood, you see all the flowers planted in yards, but there are also wild flowers around us too! Do you know the state flower of Oregon? It's the Oregon Grape! The Oregon grape was made our state flower all the way back in 1899!



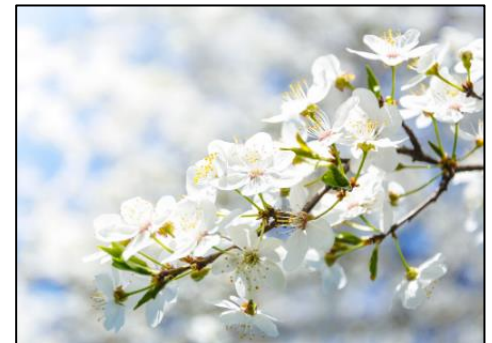
Figure 1: Oregon Grape flowering

Flowers are a way for some plants to reproduce. The flower, being all bright and colorful and full of nectar, attracts pollinators like hummingbirds or bees (See [What's all the Buzz about](#) for more information on bees). Once a flower is pollinated, its job is over, and the flower will usually dry up and fall off. Some flowers only open for a few hours, and others last for weeks. Once pollinated, the plant starts producing seeds. We'll learn more about seeds in future home explorers.

EXPERIMENT 1: All the colors of the rainbow!

You will need:

- Your observation journal (remember you can learn to make one in the [Art of Observation activity](#))
- Pencil
- Colored pencils, markers or crayons (optional)



Instructions:

1. Grab your journal and a pencil and head outside!
2. Start walking around your neighborhood looking for different kinds of flowers.
3. See how far you have to walk before you've found flowers that are every color in the rainbow.
 - a. Red, orange, yellow, green, blue, purple, pink, white!
4. Check off each color as you go and record in your nature journal whether the flower was on a tree, a bush or a plant on the ground.
5. If you brought your colored pencils or crayons, you can make quick sketches of each flower as you go! Notice the different shapes and sizes. Remember, if the flower is in someone else's yard, don't pick it without permission.
6. Which flower was your favorite? Why?

THINK ABOUT IT! Why do flowers benefit from being different colors?



A flower's color will be determined by the chemicals in the genes of the plant. The most common plant chemical that you may have already heard of is chlorophyll, which is responsible for making all the leaves and the grass green.

Bright colored flowers are trying to grab the attention of pollinators like birds and bees. Think about how an ice cream shop has a big bright sign with neon flashing lights to attract you towards buying ice cream... it's the same thing for the flowers. They need the pollinators to come and help them reproduce, otherwise they won't be able to create fruits or flowers.

Some flowers are dull and pale because they pollinate with the help from the wind. They don't want to be disturbed so they try to remain difficult to see.



CRAFT 2: Pressing Flowers

Now, we want to leave most flowers outside, so that they can pollinate and help the planet ensure that it has new seeds for next year! But, it can be very cool to reserve a few flowers to have for later. Pressing flowers is an art form that has been around for centuries. Botanists (scientists who study plants) use these specimen as a reference over time.

You will need:

- Scissors
- Parchment paper, newspaper or tissue paper
- A heavy book
- A weight (I used a jar of lentils)



Instructions:

1. When it's warm outside and there is no dew on the grass, go out and cut a few flowers. It is best to choose flowers which naturally lie flat on their own.



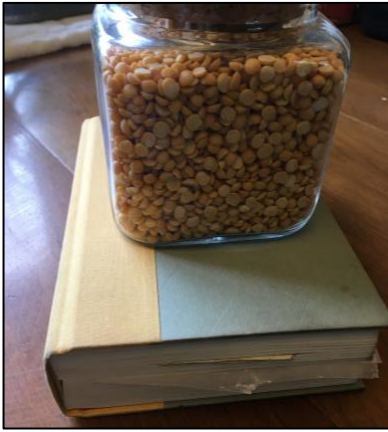
2. Cut a piece parchment paper or newspaper in $\frac{1}{2}$. Place a piece of parchment paper in the middle of your book (I used the 7th Harry Potter Book) and gently lay the flowers down flat.



3. Cover the flowers with the other piece of parchment paper and close the book.



4. Place something heavy on top of the book, like a weight or some rocks.



5. Let the flowers sit and dry out for 7-10 days. Don't rush it or your flowers may not dry out completely.

6. When they're all dry, you can take them out and tape them into your nature journal or hang them in a picture frame!



Figure 2: From saga.co.uk

EXPERIMENT 3: Dissecting a flower!

Dissecting means cutting something open to examine it. Today we will be dissecting a flower. It's a great way to learn about the different parts of a flower and use your observation skills!

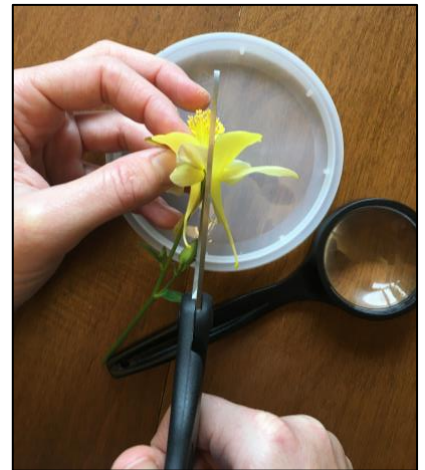
You will need:

- Scissors
- A tray or a Tupperware lid to put your flower on
- A magnifying glass (optional)

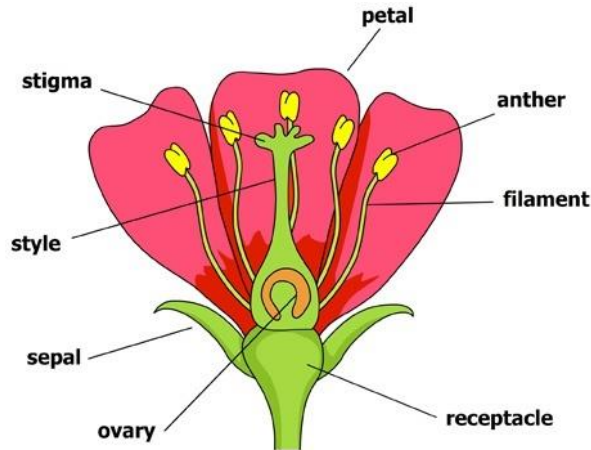


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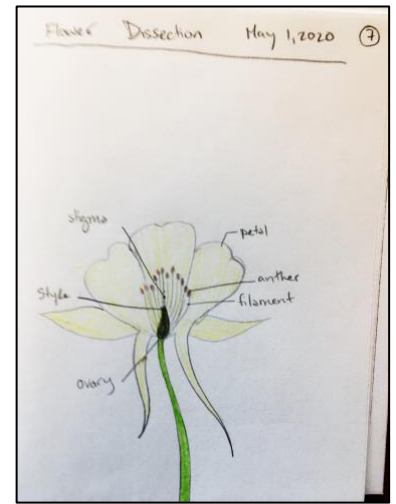
1. Go outside and find a flower you are allowed to cut. I suggest a larger flower to make it easier this first time. If you want to identify your flower, remember that you can use the [iNaturalist Seek App](#) to help you identify wild and garden flowers.
2. Hold the flower lower down on the stem and gently cut the flower in $\frac{1}{2}$.
3. Usually only 1 of the halves will really stay intact when you cut it. Lay the best $\frac{1}{2}$ on the tray. Begin to examine all of the pieces on the inside.



4. Draw a sketch of your flower in your notebook and begin labeling all of the parts using the guide below. Use your magnifying glass to help you look closer if you have one.



classroomclipart.com
http://classroomclipart.com



Digging Deeper: Flowers and pollinators working together

You may notice that the hummingbird in this picture appears to have grown a very large bill. Not because it's a Pinocchio bird that told lots of lies, but because it's evolved this bill to be the only bird that can pollinate certain flowers that have a stigma and anther that are very far down the flower's corolla tube. This is known as **mutualism**, when the birds and flowers benefit each other; the Sword-billed hummingbird has exclusive access to these flowers, while the flower is guaranteed a pollinator. Scientists study mutualisms for all kinds of plant-animal interactions across the globe!

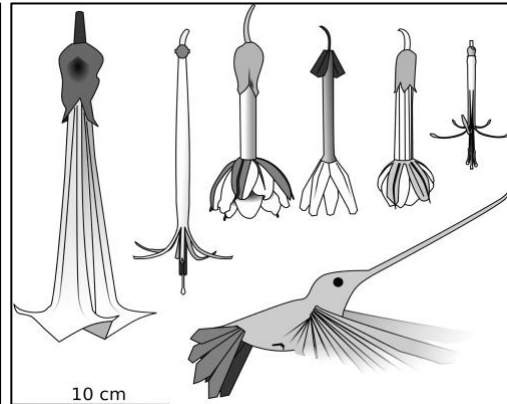


Photo by Soteras, Moré, Ibañez, Iglesias, & Cocucci

CHALLENGE!

Watch the progression: Find a flower near your house that is blooming or about to bloom. Remember where it is and check on the flower every few days. See if you begin to notice changes. Do you see pollinators on it? Does the flower eventually start to look dried out or faded in color? When do the petals start falling? Take notes of this progression in your observation journal!

Thanks for conducting science with me for this Home Explorer activity from Umpqua Watersheds Education Program.
Join me for new activities posted every week!

- Ms. Robyn

