## Meet a Plant: Rose

Get to know this common plant that grows in many places!

## LEARN

Roses are in the rose, or Rosaceae (rose-ay-see-ay) family of plants.
A plant family is a group of plants that are related to each other. Plant scientists group different types of plants into families based on ways they are similar. Other plants in the rose family include strawberries, blackberries, apples, peaches, almonds and many more!

What do all these plants share in common? Most plants in the rose family have flowers parts that grow in sets of 5 . This includes the petals, stamens, and sepals.


How many petals do you count on this Carolina Rose?

Color in the stem, petals, and leaves.

Notice the thorns growing along the stem. Most roses have thorns.

## Where do roses grow?

There are many different kinds of roses, but most varieties need at least 6 hours of sun. Some grow wild in meadows, forest edges, or along a stream. Other varieties are planted in gardens and need more care from people.

- Can you find a rose or other flowers growing outside?
- How many petals does it have?
- What does it smell like?
- Can you identify the petals, stamens, sepals, or any other flower parts?

The rose family of plants is 35 million years old, according to fossil records. Roses were probably first grown by people in China 5,000 years ago.

## PLANT BREEDING

Plant scientists create, or breed, new varieties of roses by taking pollen from one rose and using it to pollinate another. Roses can be bred to have many petals, resist diseases, or have different colors, smells or sizes. Look at the images below--these are all different kinds of roses.


How are they similar?
How are they different?
Follow the instructions in the next page to "breed" your own paper roses!

## Roses have different meanings to people around the world.

In Hungary, roses represent love for a lost friend, spouse, or relative so they are used at funerals.

In South Korea, bouquets of roses are exchanged on Coming-of-Age Day, which is the day 19 year olds become 20.

In Finland, people exchange roses to show appreciation to friends on Friend's Day.

In Catalonia, there is a legend that St. George slayed a dragon to save a princess and where the dragon's blood spilled, roses sprang from the ground. St. George's Day is celebrated by exchanging roses.

On Valentine's Day in Taiwan, the number of roses exchanged is an important symbol. A single rose symbolizes one-and-only love. Eleven roses are given to a "special someone." Ninety-nine roses are given to someone you'll love for eternity. One hundred eight roses means "Will you marry me?"

Do you use roses to celebrate?

Have you given or received roses or other flowers on special occasions?

## MAKE YOUR OWN ROSES

## Materials

- Paper cut into squares (white or colorful)
- Scissors
- Something to draw with (like a pen, pencil, or marker)
- Glue or tape


## Optional materials

- Something to color with (like crayons, colored pencils, or markers)



## Directions

| 1. Fold a square of <br> paper in half <br> into a triangle: <br> fold one corner <br> on top of the <br> opposite corner <br> and press down <br> in the middle to <br> make the fold. |
| :--- |
| 2. Fold the triangle <br> in half: fold the <br> two corners on <br> the longest edge <br> one on top of <br> the other, and <br> press down in <br> the middle to <br> make the fold. |


| 3. Fold the triangle |
| :--- |
| in half one more |
| time! Fold the |
| two corners on |
| the longest edge |
| one on top of |
| the other, and |
| press down in |
| the middle to |
| make the fold. |


| 7. Cut off 2 petals. |
| :--- |
| 8. Glue or tape one |
| of the end petals |
| on top of the |
| other end petal. |
| Your flower |
| will pop up and |
| not be flat |
| anymore. |, | Fold or curl the |
| :--- |
| round ends of |
| your flower |
| back. You can |
| roll the ends |
| around a pen, |
| toothpick, or |
| anything else |
| that's thin and |
| round to help |
| make the petals |
| curve. |

## "Breed" a rose with more petals

| 1. Make a wild rose with 5 |
| :--- |
| petals. |
| 2. Start another 2 more |
| roses, but follow the |
| directions below after |
| step 6 instead. |
| 3. Cut 1 petal off one rose |
| and 3 petals off the other |
| rose. Glue or tape one of |
| the end petals on top of |
| the other end petal for |
| both roses. Fold or curl |
| the round ends of your |
| flowers back. |
| 4. Put the rose with 5 petals |
| inside the rose with 6 |
| petals. Then put the rose |
| with 4 petals inside the |
| rose with 5 petals. You |
| can attached the layers of |
| petals together with tape, |
| glue, or by putting a |
| chenille craft wire (pipe |
| cleaner) through the hole |
| at the base of the flower. |

## Make a bouquet or garland of paper roses

Make five or more roses with stems and collect them together in a bouquet.
Thread a string through your roses to create a garland that you can wear or use as a decoration.

## Continue experimenting

Can you create a rose with even more petals? How many petals can you get on one rose?
Can you make a paper rose that looks like a rose you find living outside?

## Create colorful roses

Use colorful paper for your petals or color on white paper before you begin folding it. What color roses have you seen?

Draw different patterns on your roses. Some roses have petals that are darker on the inside of the flower and lighter on the edges.

The Rose Family by Robert Frost

The rose is a rose, And was always a rose. But the theory now goes That the apple's a rose, And the pear is, and so's The plum, I suppose. The dear only knows What will next prove a rose. You, of course, are a rose But were always a rose.

## POETRY

Poems are a way of expressing how you feel.
Write your own poem inspired by flowers.


