Title: Stop and Smell the Roses

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Level: Grades K-2

Subjects: English language arts, Science

AZ Academic Standards: K/1/2.RL.3, K.RL.5, K/1/2.RL.7, K/1/2.SL.1, K/1.L.4, SC00-S1C1-O1, SC00-S1C4-O1, SC00-S4C3-O1/2, SC01-S1C2-O4, SC01-S1C4-O1, SC01-S4C3-O1, SC02-S1C2-O2/3/4, SC02-S1C4-O1,

Brief Description: After sharing background knowledge, teacher will read a story about roses and watch a video about a local rose grower. Students will discuss what they've learned and then have the opportunity to observe, dissect and illustrate a rose and learn new vocabulary for each part. The lesson is concluded with creating rose petal perfume to celebrate their learning!

Objectives:

Students	will be	able to observe and identify the
parts of	a rose	
Students	will be	able to discuss what a rose bush
needs to	survive	and thrive right here in Arizona

 \square Students will be able to name various uses for roses

Estimated Teaching Time: 1-1.5 hours (possibly broken up over 2 sessions)

Materials:

Ш	Book:	Wanda	s 's	Roses	bу	Pat	Brisson
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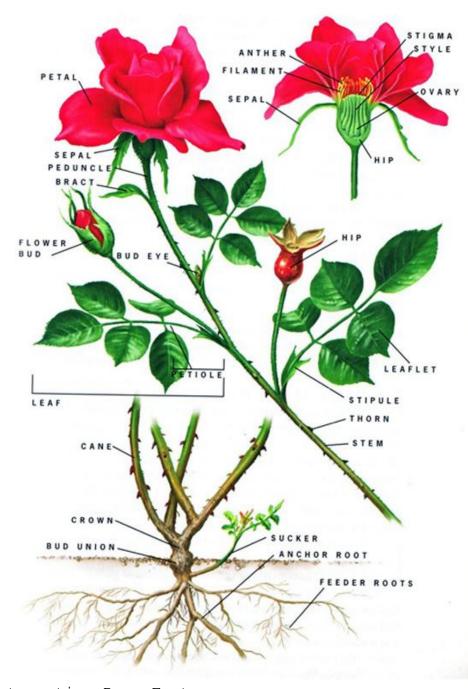
- ☐ Video: Interview with Leyton Woolf from Woolf Layton Rose Farm in Waddell, Arizona:
 - https://vimeo.com/24927031
- □ Roses, one for each group of 3-4 students (thorns removed)
- ☐ Drawing paper
- ☐ Pencils
- ☐ Crayons, markers, or colored pencils
- ☐ Hand lenses (if available)
- ☐ One of each item per group:
 - o Mason jar
 - o Rose
 - o 8 oz measuring cup with spout
 - o Fine mesh strainer
 - o Metal spoon
 - o 6 oz of water

o Individual containers for student perfume storage
 (ie: glass baby food jars or other small
 glass/plastic container)

Vocabulary: rose, flower, leaf, stem, roots, petal

Supporting Information:

Parts of a rose (from http://www.ludwigsroses.co.za):



• Interesting Rose Facts:

- o There are over 100 species of the rose.
- o Although most cut roses come from South America, most of the nations rosebushes come from right here in Arizona.
- o Arizona farmers produce 70% of the nation's rosebushes!
- o There are four families to thank for Arizona's contribution to the industry. The Francis Family out of Litchfield Park and El Mirage, the Woolf Family in Waddell, the Santa Lucia Family of Litchfield Park and Kenly Farms in Maricopa.
- o We usually call the sharp spikes on the stem of a rose bush "thorns". But these are in fact technically prickles.
- o The flowers of most species of rose have five petals except for the species 'Rosa sericea' which has only four.
- o The name "Rose" is often used as a girl's name in English speaking countries.
- o For hundreds of years the rose has been widely recognized as a symbol of love, sympathy or sorrow.
- o The rose is most commonly used as an ornamental plant grown in the garden for its beautiful flowers.
- o The rose can be used in perfumes. The nice scent of the rose comes from microscopic perfume glands on the petals. Sometimes rose petals are also dried and packed for commercial use as decoration or for scent.
- o The fruit of a rose is called a rose hip. The berry-like hip are usually red in color but some can be dark purple or black.
- o Rose hips of some species are extremely rich in vitamin C, because of this the hip is sometimes made into jam, jelly, or brewed for tea. The hip also has minor medicinal uses, used in food supplements and can be pressed or filtered to make rose hip syrup. Hip seed oil is also used in skin products and makeup products.
- o Historically the rose was of great importance to the Romans and Egyptians. Romans would use them as room decorations, or wear them on string around their neck and anything which was said "under the rose" was deemed to be a secret. The famous Cleopatra of Egypt was believed to have

covered the floor of her palace room with roses before Mark Antony visited her.

Procedures:

- 1. Start by asking your students what types of flowers they have seen before. Ask them what types of flowers do they have growing at their house? Have they ever seen a rose before?
- 2. Have students share out everything they already know about roses. Accept all responses.
- 3. Hold up a rose for the class and ask them to share what they notice first with a partner and then with the class. Walk them through three of their senses to describe the rose: sight, touch, and smell. Share with them that rose petals and hips are actually edible, just not in today's lesson. (more in the interesting facts section above)
- 4. Tell the students that they will be learning more about this special flower and even making a special project at the end of the lesson that smells amazing!
- 5. Read <u>Wanda's Roses</u> by Pat Brisson. Make a point to ask students after the book is read where does a rose grow? Under ground, on a tree, on a vine...? (A bush.) Ask students to share one or two more things that they learned after reading the book. Let the kids know that this book was realistic fiction, meaning it wasn't real, but it could have happened. Next, ask them if they think we are able to grow roses here in Arizona? (Yes, we can! It's the perfect climate.) Next, they'll watch a video about one of the largest rose growers in United States from right here in Arizona. Have them listen for new things they didn't know about roses.
- 6. Watch Woolf Roses video: https://vimeo.com/24927031
- 7. Have students turn to a friend and tell them one part they really liked from the video.
- 8. Discuss what the roses needed to survive and thrive. (Soil, sunlight, water, air, and care from the farmer)
- 9. Let the students know they did a great job learning about roses today and that now it's time to put on their botanist (plant scientist) hats and investigate roses first hand!
- 10. Explain that each group will get one rose. Each student will receive one drawing paper. They are to use their observation skills to help them sketch out the rose on the drawing paper and label it with the parts they know. Make sure to have the vocabulary

words posted in the room for them to reference: flower, leaf, stem, petal (feel free to use additional words from diagram for older students)

- 11. Give the students ample time to explore and illustrate on their own, adding color to their illustrations. Then walk them through the parts of the rose to make sure they have labeled everything correctly, addressing any misconceptions. Also, ask what part of the plant is missing here? (roots) Explain, the cut roses are just part of the rose bush.
- 12. After this part of the lesson is over, have the kids gently remove the petals from the flower and set aside for the perfume making. Have them use hand lenses to closely observe the anthers, filaments, stigma, and styles, adding a sketch to their drawing paper.
- 13. Clean up, keeping rose petals, and all supplies can be traded out for perfume making.
- 14. Let students know they will be making perfume today using rose petals. They can keep it for themselves or make it for their moms or sisters.
 - a. Step 1: place rose petals inside mason jar.
 - b. Step 2: using metal spoon, smash/grind petals into a paste or at least break down into very small pieces. (The smashing releases the essential oils which provide the aroma.)
 - c. Step 3: Add the water to the petals in the jar using measuring cup.
 - d. Step 4: Screw lid on tight and shake.
 - e. Step 5: Let mixture steep for at least an hour, up to overnight.
 - f. Step 6: Strain petal/water mixture through strainer back into measuring cup.
 - g. Step 7: From measuring cup pour equal amounts of "perfume" into individual containers for students to sample and take home.
 - h. Step 8: Discard spent rose petals and enjoy!

Evaluation Options:

Collect illustrations and assess labeling and
diagram for accuracy.
Have students identify and explain the parts of
the rose to you or a partner.
Have students explain what roses need to survive
and thrive and why Arizona is the perfect place
to grow roses.

Extensions and Variations:

- 1. Make a class graph with favorite colors of roses.
- 2. Grow roses with your students in an outdoor space at school. Try growing different varieties to see which grows best in your region.
- 3. How to make paper plate roses:
 https://web.kidsactivitiesblog.com/50037/paper-plateroses



Resources:

1. Excellent PowerPoint from the University of Arizona
 Cooperative Extension- beautiful pictures and
 information to share with your students:
 https://cals.arizona.edu/extension/ornamentalhort/land
 scapemgmt/aclp/rosecare.pdf