The Amazing Amaryllis

Overview: Add a little holiday cheer to your classroom as you practice your measurement skills with the amazing amaryllis bulb.

Grade Level/Range: PreK - 2nd Grade

Objective:

Students will learn about bulbs and track their growth using age-appropriate measurement tools

Time: 6 to 10 weeks

Materials

1 or more amaryllis bulbs potting soil pot (s) measuring tools of your choosing

Background Information

Although spring-flowering, cold-hardy plants such as tulips and daffodils are often the first to come to mind when talking about bulbs, there are many other plants that feature this botanical structure. The amaryllis is an example of a tender bulb that has become a holiday staple due to its flexibility to be grown indoors in pots and forced to bloom during the holiday season. Native to areas of South Africa and South America (Peru), the amaryllis cannot survive cold winters outdoors, but with their big and bold flowers, they are a stunning addition to indoor holiday decorations. Because they do not need a cold treatment in order to initiate their blooms, they are also one of the easiest bulbs to grow. Additionally their fast-growing, large flower stalks offers an excellent opportunity to help students fine- tune their measurement skills.

One word of caution: Like most bulbs, amaryllis bulbs are poisonous if consumed. If you are in a classroom where you think that may be an issue, then you will want to keep your plant in a location that is protected and or carefully monitored.

Laying the Groundwork

Read *Inch by Inch* by Leo Lionni. Brainstorm with your students, what are some different ways to measure things? Why do we measure things? What can our measurements tell us? What can our measurements tell us about plants specifically?

Exploration

Plant a classroom amaryllis bulb to practice your measurement skills (and brighten up your winter classroom).

1. Gather the necessary supplies. You will need bulbs, soil and pots. To help with your selection:

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Soil - use a well-draining indoor potting mix with a slow-release fertilizer included. The bulbs contain all the nutrients they will need until they bloom; then, the plants can be grown indoors until the end of winter and then kept as container plants or planted in the ground.

Containers- Although you want the plant to be able to put out a healthy root system so that it will be well anchored, amaryllis actually like to be in close quarters. The standard recommendation is to allow 1/2 -to 1-inch of space between the bulb and the container. If you put the bulbs in too large of a pot, the soil has a tendency to stay too moist and may develop mold and attract fungus gnats. A pot that is about 6" or so in diameter is usually a decent size for most amaryllis bulbs.

When selecting your container, also remember that the flower blooms can be fairly heavy, so lightweight containers may topple over. You may want to use a heavy clay pot, or if you do use plastic containers, place a layer of rocks at the bottom of them before putting in the soil to keep them more stable. Baskets and metal containers are other readily available options. No matter what type of container you choose, make sure it has holes in the bottom to allow access water to drain. If you find a wonderful container without holes, just add them yourself with a drill.

2. Plant the bulbs when your students will have at least 6 weeks to observe their growth. You don't want the plants to mature while you are off on an extended break. When planting, begin with moistened soil. The soil should feel like a moist sponge, but should not drip water when squeezed. Position your bulb with the narrow end pointed up. With amaryllis, you do not want the tip to be covered by soil. You want about 1/3 of the bulb protruding above the soil.

3. Place your pots in a warm, well-lit spot. Don't water them again until the first leaf or flower bud starts to grow. Then keep the soil moist. As mentioned above, make sure the location you choose is out of reach from nibbling children and pets as the bulbs are poisonous.

4. Begin to track growth as soon as the stalk emerges from the bulb (sometimes it will already be peaking out when you plant). You can use traditional measuring tools like rulers (metric or English units) or be creative and use blocks, string or relative measurements of other classroom supplies ("our stalk is the size of a matchbox car today").

5. As your plant gets taller, you can add in an estimation game and have students predict when the flowers will open. Mark it on the calendar and see who gets closest. Winner gets bragging rights.

6. Once it blooms, enjoy! If kept in a cooler location, out of direct sunlight, the flower may last a couple of weeks. Sometimes you get lucky and a second flower stalk will emerge.

Making Connections

Chart your data and plot the growth curve of your amaryllis. Did it grow slower or faster than you expected? Did it grow slower or faster than other plants in your garden?

Branching Out

• Check out these additional KidsGardening resources to learn more about bulbs:

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Bulbs: Fall Planting for Spring Blooms

https://kidsgardening.org/garden-activities-plant-fall-bulbs-for-spring-blooms/

Forcing Spring-Blooming Bulbs:

https://kidsgardening.org/garden-activities-forcing-spring-blooming-bulbs/

Tulip Growing Guide: https://kidsgardening.org/growing-guide-tulips/

• Welcome spring by participating in Journey North's Tulip Tracker available at: https://journeynorth.org/tulips

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