

# BULB BOTANY

(\*Special materials budget: = \$5 – \$15+)

Residents will explore dissected bulbs and learn about their parts and functions, then they will experiment growing flowers and/or vegetables in different growing conditions. The Eldergrow garden offers a therapeutic connection to nature where residents engage in meaningful ways with the garden – cognitively, socially, spiritually, emotionally, and physically.

## Activity Objectives:

Objective 1: Resident will engage spacial awareness (SA)

Objective 2: Resident will engage cognitive stimulation (CS)

Objective 3: Resident will engage motor skills (MS)



## MATERIALS:



- Vege bulbs such as garlic, leek and/or shallot
- Freesia corms: [Link Here](#) (Delivery may take a couple of weeks, so call to see if your local nursery or big box store has them in stock for local purchase. Fritillaria and Spanish Blue Bell bulbs are also Eldergrow approved plants for this activity.)
- Small plastic water bottles (1 per resident) OR for a nice holiday gift giving idea, here is a bulb growing vase option as pictured top right (smaller bulbs can be tied together with rubber bands): [Link here](#)
- Scissors, paper towels, pencils, twine, tape, garden journal/paper
- Knife to cut bulbs/corms in half and seal in plastic baggies prior to activity
- Small watering can (Eldergrow Garden)
- Print & cut out "Freesia Care Directions" (last page)
- Talking Points: "Bulb Botany"
- Optional: "Seeds" Talking Points (from Seed Starting Investigation class): [Link here](#)
- "Observing a Bulb" Printable [Link here](#)
- *Optional:* Gloves & magnifying glasses
- *Optional:* Freesia might need stakes [Link here](#)
- *Optional:* Use small pebbles/rocks and plastic cups for another option to support bulbs in water (as pictured to the left).

## PREPARATION:

- Move garden into central location so residents can gather around it - **brakes on!**
- Place supplies off to the side until ready to use. Cut a variety of bulbs in half and place in plastic baggies.
- Fill watering can and mister with water and have garden journal ready for any comments or observations.

## ACTIVITY DIRECTIONS – CHOOSE 1 OR ALL 3 PARTS:

### 1. OBSERVATIONS & "SCRATCH & SNIFF" SENSORY STIMULATION:

- Gather around the Eldergrow garden so residents can **make garden observations** for the garden journal.
- If you have a new plant to add to the Eldergrow garden ask residents if they **recognize the new plant of the day**, giving them descriptive hints until it is identified.
- Engage residents in a "**Scratch & Sniff**" **sensory stimulation** with herbs in the garden.

### 2. CONVERSATION STARTERS & TALKING POINTS:

- **Encourage conversations!** *What is a bulb?* (Plants growing from an underground mass of food storage tissues. This mass is also called a bulb.) *Do you know any common plants that are grown from bulbs?* (Examples include tulips, daffodils, paper white narcissus, onions.)
- **Have residents read the Talking Points aloud: "Bulb Botany"**. Talk about their unique ability to store enough energy to produce leaves and flowers for the next growing season. *Do all plants have the ability to store enough food for one growing season? (No.) What are some of the benefits to a plant with this food storage capacity?* (This is an adaptation for survival because they have enough food stored to survive at least one season with poor environmental conditions.)

### 3. ACTIVITY DIRECTIONS: BULB PLANTING & GROWING OBSERVATIONS

- Show residents example bulbs and corms. If possible, have multiple types of bulbs, corms, rhizomes, etc. so they can compare and note similarities and differences. First, ask them to describe what each looks like from the outside. Instruct them to draw a picture of each type of sample bulb you have available.
- Review drawing of the parts of a bulb from Talking Points. Talk about the different parts and what they do.
- Cut sample bulbs in half (vege bulbs from the grocery store and/or freesia corms). Place the bulbs/corms in plastic bags to give residents an opportunity to view the cut bulbs. Another option is for residents to wear gloves while handling the bulbs. (Use magnifying glasses for a closer look.)
- *Optional:* have residents draw the inside of the bulbs and then label the different parts. Depending on the maturity of the bulb and the conditions it has been exposed to, they may or may not be able to clearly see the young leaves and flowers. If you do not see any leaves or flowers in this batch of bulbs, try to find a few more mature bulbs so they can see an example.
- Now it's time to plant! First cut the top off of a water bottle, take the lid off and turn top upside down.
- Secure several small bulbs together with a rubberband so they don't slip through the bottle's hole.
- Place the bulb(s) root side down (pointy side up).
- Fill the bottle with water and nestle the upside down top inside the bottle's base (water should just barely cover the bottom of the bulb/s). (Water will need to be refreshed periodically.)
- Place the bulb in a sunny window. Experiment by planting some bulbs in the Eldergrow Garden soil!
- Continue observing the bulbs and watch what happens (use "Observing a Bulb" worksheet or a strip of paper taped to a window to measure growth). Add water to the container as the water level begins to go down. (**See Bonus Activities** to conduct various bulb growth experiments and gift ideas.)



**Bulbs are growing here!**

Add water when water level falls below base of bulbs.  
Plants will need to be transplanted into potting soil when  
top heavy and staking support once they bloom.

***Thank you!***

## CLOSING & ACTIVITY AMENDMENTS FOR DIFFERENT LEVELS

Have your **garden journal** ready again to write down **resident comments, activity participation, garden observations** and **tasks**. For residents with other **limitations** or those who need **more challenging projects**:

- Encourage a resident with **hand support assistance** or have them hold your wrist as you cut the tops off of the water bottles, use the cute mister or pour water. For low vision or residents with low finger dexterity, have them guide your hand as you place the bulb(s) into the container and add the paper towel.
- Assist as minimally as possible to the particular resident's ability. **This way it's a collaboration that plays to the resident's strengths, allowing them to be successful and fulfilled with the work they can do!** This may require you to ensure a staff member can work with that particular resident during the activity so they are still included and supported.
- Changes in the bulb growth can help stimulate short term memories, so do encourage residents to make these observations as well as reflect back on previous observations so they can see how their **bulb plant is growing over time**. Some folks like to write the names of the plants on the chalkboard or piece of paper for residents to read about in the future. Consider adding a couple of noteworthy aspects of your choice planting bulb for them to continue to learn and remember about this activity. Tape copies of the Talking Points and uses around the room or to the front of the ElderGrow Garden for future reference.
- **Residents who would like more activities:** Check out this lesson's Bonus Activities in your ElderGrow Portal to sprinkle on your calendar throughout the month.
- Ask staff to **assist residents with walkers or wheelchairs** to the ElderGrow garden to make observations, and tend to the garden. If a resident can't make it to the garden, **bring the garden to them!** The ElderGrow garden is on wheels, so you can roll it to their doorway to make garden observations and "Scratch & Sniff" sensory stimulation. **(Lock brakes!)** Or take the bowl of pruned plant parts in a bowl for them to explore!
- Some residents prefer to only **assist with gross motor garden care**. One may enjoy hand tilling the soil or adding new soil around the plants. Someone else may like to water each plant to the count of three or dust off the shelves and garden structure.