PLANTING



INTRODUCTION

Like younger students, lower elementary students enjoy planting seeds, caring for plants, and watching them grow. Since gardening is a valued and popular activity in every Montessori classroom, many students at the lower elementary level will already have gardening experience. Few will have none at all.

The Planting activities in this section help students make connections between what they observe in nature and what they study in school. For example, by growing plants from seeds, students enhance what they study in Natural Sciences. While monitoring the growth of their plants, students use skills they are developing in Mathematics, such as measuring, charting, and drawing graphs. Students can also make links between the plants they are growing in the classroom and what they are learning in the Five Great Lessons and in History about how early humans first cultivated plants for food.

Many Montessori classrooms contain indoor plants that the students care for

year-round. However, most Montessori teachers try to present Planting activities like the ones in this section at a time of year when it is possible to take advantage of increasing light and warmth — nature's best growing conditions. In the Northern Hemisphere, for example, this optimal growing time of year will occur in early spring. If the school has an outdoor area, the students can prepare an outdoor garden, then transplant to the outdoor garden the seedlings nurtured indoors.

Prior to introducing these Planting activities, teachers can discuss with the students several topics that help instill in the students a wonder and appreciation for nature:

- the beauty of plants
- the new life that planting brings
- the common needs of plants: sunlight, water, and air

Tips for presenting Planting activities

- Caution students about over-watering the seeds that they have planted. Explain that seeds will not flourish if they are too wet, and that moist soil just slightly damp to the touch works best.
- Instead of giving students a watering can, provide an eyedropper. Using an eyedropper both helps avoid overwatering and controls the amount of water given to a plant. Using an eyedropper also provides the student with an opportunity to practice fine motor skills and develop hand-eye coordination.

- Make a "watering tray" by placing a small pitcher of water and an eyedropper on a small tray. Keep this tray in a permanent spot on a shelf in the Practical Life area, near a sink. Students will use the watering tray for all Growing Things activities, and be responsible for refilling the pitcher as a courtesy to the next student using the watering tray.
- Make small cardboard signs that read I Am Watered, then tape the signs securely to wooden craft sticks. Students can then stick one of these signs into the soil of a plant after it has been watered. The sign alerts the other students that a plant does not need any more water that day. (The signs will need to be removed at the end of every day or on a schedule that allows the plants to dry out a bit between waterings.) Another idea is to put a red dot (for Stop) on some craft sticks. A student who has just watered a plant will place a Stop stick in the soil as a sign that the plant does not need any more water that day.
- With the students, work out a schedule for caring for the plants. A schedule might assign a job such as watering to students on a rotating basis.
- To enhance their practical experience, encourage students to help care for houseplants and outdoor plants at their homes.

ACTIVITY 1

Making Grass-Cup People



Purpose

To practice creativity, motor skills, patience, and caring for another living thing; to provide the right conditions for a plant to grow; to appreciate how plants grow in nature.

Material

Tray containing: tacky craft glue; bowl of pompoms; dish of googly eyes; dish of pipe cleaners pre-cut into 2-inch (5-cm) sections; dish of grass seed; bowl of potting soil, approximately 1 cup (250 mL), and a small scoop.

Clear plastic cups, enough for all students.

Permanent marker and a roll of masking tape.

Container of extra soil, enough for all students.

Watering tray containing a pitcher of water and an eyedropper.

Presentation

- Most Montessori teachers present this activity in Year 1.
- In advance, prepare material and place it on a tray, then place the tray on a shelf.
- Place the clear plastic cups and container of extra soil on the shelf next to the tray.
- Place the watering tray in a permanent location on a shelf in the Practical Life area.

PART 1: GETTING READY

- Announce that students will have an opportunity to make something interesting that has a cup for a head and grass for hair.
- Go to the shelf where the tray of material (tacky glue, googly eyes, and so on) for this activity is kept, take one plastic cup from the shelf and add the cup to the material on the tray, then bring the tray to the work area. For now, leave the watering tray on the shelf.
- Explain the activity: Students will make a "grass-cup person." First, the students will use pompoms and other material to create a face on a cup. Then, the students will fill the cup with soil and plant grass seeds in the soil. The students will care for the seeds, and in time, the seeds will sprout, producing grass that looks like hair on the grass-cup person.

- Explain that the glue will need to set undisturbed for a couple of minutes.
- Once the glue is set and the googly eyes, pompom, and pipe cleaner seem well attached to the cup, take the small scoop and potting soil from the tray, then scoop potting soil into the cup until it is about three-quarters full.
- Pick up a small amount of grass seed (tip: use fingertips) and sprinkle the seed on top of the soil.
- Sprinkle another scoop or two of soil onto the seeds, just enough to cover them, then to gently pat the soil covering the seeds.

PART 2: MAKING GRASS-CUP PEOPLE

- Take the plastic cup
 from the tray and place
 it on the work area. Take the tacky craft
 glue, two googly eyes, a pompom, and a
 pipe cleaner from the tray, then make a
 face on the cup by gluing on two googly
 eyes, then gluing on the pompom for a
 nose and the pipe cleaner for a mouth.
- Tear off a piece of masking tape which is large enough for your initials (or name) and which will fit on the plastic cup.
 Write your initials on the tape with the permanent marker, then stick the tape to the cup. Explain that when making their own grass-cup people, students

will want to write their names or initials on their cups in order to monitor the progress of the seeds.

PART 3: TAKING CARE OF THE GRASS-CUP PEOPLE

- Bring the watering tray from the shelf to the work area.
- If necessary, demonstrate how to use the eyedropper to collect some water from the pitcher, then water the seeds in the cup until the soil over the seeds is moist. Ask the students to feel the soil, to experience what moist soil feels like.
- Explain that in order to grow, seeds
 need to receive not only soil and water,
 but also sunlight. Place the cup in a
 sunny spot in the classroom, such as
 a windowsill.
- With the students, discuss that the seeds will need to be watered regularly, but not over-watered, and set up a schedule for watering. Explain that with proper care, the seeds will grow into grass in a couple of weeks, and that this grass will look like hair on the grass-cup person.
- Encourage the students to make grass-cup people on their own.
- Remind the students to clean the work area, to place the appropriate material back on the activity tray and the watering tray, then to return the trays to their proper places on the shelves when finished the activity.



 Also remind students to refill the water pitcher as a courtesy to the next student who needs to water plants.

Extensions

- Monitor the growth of the grass daily, and keep a written record of the dates and times the cups are watered, as well as the weather (sunny or cloudy) on each day.
- Measure the growth of the grass with a ruler, and then make a chart or graph showing the growth.
- Instead of grass, plant other kinds of fast-growing seeds, such as alfalfa, radish, and mung.