

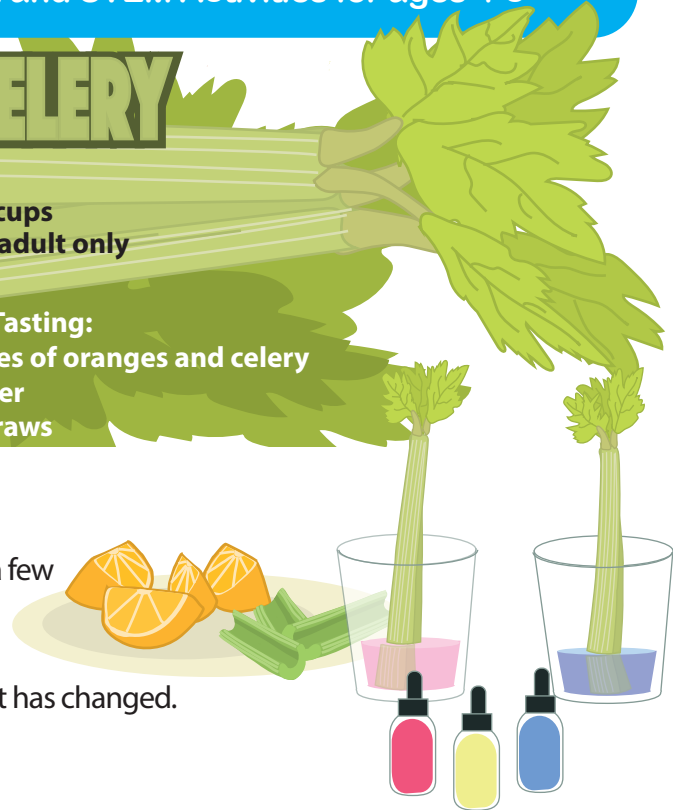
CRUNCHING ON CELERY

You will Need:
(enough for all of the children)
food coloring
stalks of celery with leaves

water
clear plastic cups
knife for the adult only

Snacks for Tasting:
cut-up pieces of oranges and celery
cups of water
drinking straws

1. Cut the bottom off the celery stalks. Set one piece of celery aside as your "control" for your experiment.
2. Give each child a cup with about 1" of water and a stalk of celery.
3. Pass around the food coloring. Have children choose a color, drop a few drops into their cups and then add the celery. Set these cups aside.
4. Give each child another cup of water to drink, a straw, celery and oranges to taste and discuss.
5. When you're done with the snacks, check on the celery to see how it has changed.



- What kinds of vegetables and fruits have you eaten today?
- What does your body need when it's hot out or when you're running?
- Where and how did water travel in the activity? How else have you seen water travel?
- How is the celery in the cups different from the celery you set aside?

Sing



You probably know this song in English, but can you figure it out in Spanish? Kids all over the world sing a lot of the same songs. In French, it's "L'araignée Topsy."

La araña pequeña

La araña pequeña
subió, subió, subió,

Vino la lluvia
y se la llevó.

Salió el sol
y todo lo secó.

Y la araña pequeña
subió, subió, subió.

READ

The Thirsty Moose
by David Orme. Gingham
Dog Press, 2005.

DISCOVER

People need to drink water to stay hydrated and healthy. When it's hot and you sweat, water comes out of your skin. You can get the water you need by drinking from a cup and from foods like celery and oranges. In the garden, water travels through the roots of the plants, up the stem, into the leaves, like the colored water in your experiment. Water travels in many ways – ocean waves, through a drinking straw and out of a garden hose.

Teaching Tips

GrowingGreat activities encourage children and adults to learn and play together. We suggest you alternate between quiet, focused time and moving and playing together. For this activity, we start with the hands-on science activity, then get up and do the song and hand motions, and finish with story and snack. After the story, we check the celery to see what happened. Whenever we teach, we think about these five questions* and we hope you will too.

1. Do you encourage children to play with science?

We focus on process rather than content. We allow children to practice STEM (science, technology, engineering, and math) skills such as testing hypotheses and problem solving. In this activity, we focus on engineering – How do we apply what we know about how water moves through drinking straws to garden hoses? For an added challenge, you can compare what happens to celery and to your hand inside a plastic bag. Celery and people both “drink” and “sweat.”

2. Are there opportunities for language development?

We read stories, ask lots of questions and sing songs to connect with students and teach vocabulary. We stop frequently throughout the story time to allow children to talk about what we’re reading. The Itsy Bitsy Spider and The Thirsty Moose both include animals that can be found in the garden. Singing a song is a great way to learn another language. You can sing or read outdoors and look for spiders, flies and other insects and arachnids. You probably won’t find any moose, though.

3. Are the experiences open-ended?

We offer more than one way to engage with materials in a setting where there can be more than one right answer. We ask open-ended questions and listen to children’s answers. We include a range of content to be customized to your students’ grade level, knowledge and interests.

4. Do your environment and materials include a mixture of familiar and new things?

We provide authentic, real-life experiences that encourage children to ask “why,” using edible materials from the garden and grocery store.

5. Are you a co-explorer with the children, not an expert?

We allow children time for self-directed experimentation. We can play and be messy too.



GrowingGreat’s mission is to empower every child to grow up healthy through science-based garden and nutrition education. Does your school have a garden or nutrition education program? Email info@growinggreat.org for more information.

Written by Jennifer Jovanovic
Spanish Translation by Laura Hoyos Kainsinger
Illustrated by Dennis Smith



Community Partner, Para Los Niños
Sponsored by the Astellas USA Foundation
* adapted from the Science Centers Early Learners Collaborative

October 2016