

## Cross Curricular Activity: Science

**Lesson:** *How Do Stems Work?*

**Grade Level:** 1- 3

**Overview:** The exercise uses food coloring and plants to explain the function of a stem.

**Approximate Duration:** This exercise will use 20 minutes of class time for 2 consecutive days.

**National Social Studies Standards:** NS.K-4.3 Life Science

[http://www.educationworld.com/standards/national/science/k\\_4.shtml](http://www.educationworld.com/standards/national/science/k_4.shtml)

**Objective:** Students will learn how plants use their stems to transport water and nutrients to the rest of the plant.

### Procedure:

Materials:

1. Straws
  2. Paper cups
  3. Water
  4. Stalk of celery
  5. Food coloring
  6. Paper
  7. Crayons
- Hand each student a straw and a paper cup.
  - Pour a small portion of water into each cup.
  - Tell the students that they are the plants and that their straw is the stem. Have the students drink the water in their cup through the straw.
  - To further show the students how stems work take the celery and cut approximately one inch off the end, leaving the leaves. Place the stalk of celery into a glass of colored water with the leaves facing up. Tell the students that you are placing the celery in the colored water to see what happens overnight.
  - Have the students draw what the celery looks like before the water has begun to travel up the stem.
  - Wait one day and have the students examine the celery.

### Assessment:

- Have the students draw what the celery looks like after one day of sitting in the colored water.
- Have students discuss what took place.

**Inspired by:** <http://www.eduref.org/cgi-bin/printlessons.cgi/Virtual/Lessons/Science/>