activity

Leave the Leaves

Leaves not only help a plant make its own food. Leaves also help plants collect moisture from the soil. Why? Because more leaves mean more space in a plant for water to go. More space for water to go means more will be collected. In this experiment you'll see if a plant with leaves can move water from the soil better than a plant without leaves.

1 Place the four celery stalks side by side on a cutting board. The place on the stalks where the leaves start should line up.

2 Cut the stalks of celery 4 inches below where the stalks and leaves meet. The celery stalks should all be the same length.

3 Take two of the celery stalks and cut off all of their leaves. All that is left is a bare stalk. Now you'll have two stalks with leaves and two without leaves.

4 Fill the cups with water and add 10 to 20 drops of food coloring into each cup.

5 Put one celery stalk in each cup. Let the celery sit in the colored water for 2 hours, then take the stalks out.

6 Use the vegetable peeler to take off the outer layer of celery so you can see how far the color has traveled.

Things to notice

- ✿ Which celery stalks collected the most color?
- ✿ Which collected color the fastest?
- ✿ Did leaves make it easier or harder for the celery to move water?
- ✿ What else did you notice about this experiment?

Supplies

- 4 fresh celery stalks with leaves, the same size
- ruler
- knife
- 4 cups
- water
- red or blue food coloring
- vegetable peeler
- your science journal