



THE HOME LAB

Cabbage Colors

AS SEEN ON OUR
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CHANNEL
MadScienceGroup

What you need:

- 1 head of Napa cabbage
- 4 different colors of food coloring
- Scissors
- 1 spoon
- 4 clear drinking glasses
- Water



Note: Napa cabbage is also known as celery cabbage, or Chinese cabbage. If your local store does not have it, celery stalks or carnations also work well for this experiment.

What you do:

Step 1: Fill each clear drinking glass one quarter full of water.

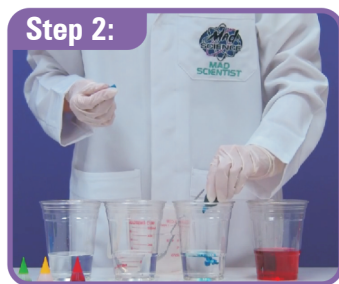
Step 2: Add a few drops of food coloring to the water to make four different colors. You can experiment by mixing colors together!

Step 3: Stir the first glass to mix the color well. Repeat for each glass, rinsing your spoon between each.

Step 4: Cut 4cm (2") off the bottom of four cabbage leaves.

Step 5: Put one leaf into each drinking glass.

Step 6: Let the cabbage leaves sit in the colored water for 24 hours. What do you observe?



What's going on:

Plants need water and nutrients, just like we do. Little tubes called xylem draw the water up from the roots of the cabbage like a straw. This process is called capillary action. Water molecules travel up the little tubes so that the plant can get nutrients from the soil. By coloring the water that the leaves are soaking in, you can see this capillary action at work!



Now try this:

Try mixing food coloring to create a cabbage rainbow – red, orange, yellow, green, blue, indigo and violet!

