

WHY DO LEAVES CHANGE COLOR?

Have your kids been curious about why leaves change color in the fall? Help them figure it out with this STEM activity!



INSTRUCTIONS

- 1 Have your kids pick three green leaves from a tree in your yard or nearby.
- 2 Help your kids break the leaves into tiny pieces and put them in the jar.
- 3 Pour rubbing alcohol over the leaves until they are just covered.
- 4 Mash and stir the leaves into the alcohol until it turns slightly green.
- 5 Cover the jar with the baggie and place the jar in a small bowl.
- 6 Pour hot water into the bowl.
- 7 Leave the jar in the water for 30 – 60 minutes, until the alcohol is dark green.
- 8 Cut a strip off of the coffee filter and drape it over the jar so it can reach into the alcohol.
 - The liquid will travel up the coffee filter and the colors will separate as the alcohol evaporates off the coffee filter. Let this happen for about an hour for the full effect.
- 9 When the alcohol has evaporated, you'll be able to see what color the leaves would be if they weren't so green, which is what color they will turn in the fall!

MATERIALS



3 leaves from the same tree

Rubbing alcohol



Jar

Plastic baggie or plastic wrap



Paper coffee filter

Small bowl or pan



Hot water

EXPLANATION

Leaves contain chlorophyll, which is what makes them green. Chlorophyll is so dominant it covers up all the other colors within leaves. In the fall, the chlorophyll in the leaves breaks down (which was the job of the alcohol and hot water in this experiment), allowing other colors to shine through!

Adapted from How Wee Learn