



Trees



BIG IDEA

Trees are worth celebrating for all the great things they do! They release oxygen into the air that we breathe, they provide shade and homes for animals, and they bring beauty to natural spaces, especially those whose leaves change color with changing seasons.

WATCH

Watch the *For Real* segment from *Buzz and the Tree* where Booker and Kimmie do an experiment to explore why the leaves of some trees change colors in the fall.

- Before playing the video, ask children to pay attention to what Booker and Kimmie learn causes different colors in leaves.
- After watching, have a discussion about why leaves change color. Feel free to play the video again to help children remember. Ask questions like:
 - What is in the leaves that make them look green?
 - What happens in the fall that reveals new colors in the leaves?
 - Why aren't leaves yellow and orange all year?

GET OUTSIDE: To Tree or Not To Tree?

Locate two spots near you where children can compare an area with trees on the street and one without. Visit both locations and take some quiet time making observations. Children can write, draw pictures, and/or take photographs to help them remember what they observe. Afterwards, lead a discussion about what they noticed:

- What effect do trees have on a street?
- How do trees affect the temperature, shade, or feel of an area? If you have access to thermometers, use them to measure the air temperature in the shade of the trees and in the open sunlight.
- What benefits do street trees provide? (They cool and clean the air, muffle noise, and provide beauty.)
- What problems can trees cause? (Their fruits and leaves fall. They block signs and have a potential to damage power lines. Their roots can damage sidewalks.)
- Which area do the children prefer and why?

TREES	NO TREES
 Shade Squirrels	hotter concrete, less pretty



Trees



EXPLORE: COLORS OF THE LEAVES

This experiment shows the colors of chemicals that cause leaves to change in the fall. As the days get shorter, the green chlorophyll in the leaves gets absorbed back into the tree, revealing other chemicals with different colors that are left behind.

Materials:

- Green leaves
- Bowl or cup
- Rubbing alcohol
- Paper towel or coffee filters
- Blender (optional)

Instructions:

1. Tear up leaves into tiny pieces (or supervise use of a blender) and put in a bowl.
2. Pour rubbing alcohol into the bowl to cover the leaf pieces.
3. Tear the paper towel into strips.
4. Lay the paper towel strips over the edge of the bowl so that one edge of each strip is in the rubbing alcohol mixture and the other is outside the bowl.
5. Wait at least 2 hours.
6. Come back and observe your paper towel strips. Ask children to share what colors they see and where they think these colors came from while the paper towel was soaking.



Photos from *Cyberchase For Real*