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# FACTivity

In this FACTivity, you will imagine what sugar maple trees in the northeastern United States might look like at four different times during the fall. To do this FACTivity, you will need four sheets of plain white paper and crayons or colored pencils. At the bottom of the first sheet, write “September 1.” On the bottom of the second, write “September 30.” On the bottom of the third, write “October 7.” On the bottom of the fourth, write “October 15.”

Take a large sheet of white paper and divide into four even sections. Label each section with each of the dates listed above. The pictures will be of either sugar maple leaves or trees. You can create a picture of just a few leaves or of an entire forest. Before coloring each picture, think about what you learned in this article. After you complete your pictures, share them with the class by posting them on the wall. What color were the leaves on each of the four dates? Why did you choose those colors? What was

happening to the leaf pigments on October 7? The students should compare their pictures and identify their similarities and differences.

## FACTivity Extension

Pigment is the material in cells and tissues that gives color to plants and animals. In this article, you learned about pigment in plant leaves. Humans have pigments, too. Look around your classroom and observe your classmates. As a class, identify three places that you can see where pigment affects a person’s color. Which of those might change color over a person’s lifetime?



If you are a PLT-trained educator, you may use PLT Activity #42, “Sunlight and Shades of Green,” as an additional resource.

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### Useful Web Resources:

Starting in September, there is a Fall Color hotline on the Forest Service website where students can track fall leaf color change. <http://www.fs.fed.us/>

#### Environmental Education for Kids—Leaves

<http://www.dnr.state.wi.us/org/caer/ce/eek/veg/trees/treestruicolor.htm>

#### Science News for Kids—A Change in Leaf Color Article

<http://www.sciencenewsforkids.org/articles/20060927/Feature1.asp>

**Maine’s Fall Foliage Video** • <http://www.maine.gov/doc/foilage/kids/movie.html>

**Nitrogen Cycle for Kids** • <http://www.eo.ucar.edu/kids/green/cycles7.htm>

Adapted from: Schaberg, P.G., van den Berg, A.K., Murakami, P.F., Shane, J.B., and Donnelly, J.R. (2003). Factors influencing red expression in autumn foliage of sugar maple trees, *Tree Physiology*, 23:325-333. <http://www.treearch.fs.fed.us/pubs/6986>.