

Why Leaves Change Color



Read the passage. Then answer the questions in full sentences.

Name _____ Date _____

In spring and summer, a tree's leaves are busy making food. They do it in tiny cells that hold chlorophyll. Chlorophyll takes in energy from sunlight, and the leaf uses that energy to turn water and carbon dioxide, a gas in the air, into food for the tree. Chlorophyll is also what makes leaves green.

Leaves have yellow and orange colors in them too. For most of the year there is so much green that we cannot see them.

In the fall, the days get shorter and the air gets cooler, and the leaves stop making food. The chlorophyll breaks down, the green fades, and the yellow and orange colors show at last.

Some trees make new colors in the fall: reds and purples. Dogwoods and sumacs turn reddish purple. Cool days that stay above freezing help maples turn bright red, but an early frost makes the red weaker.

1. What makes leaves green?

2. Which trees turn reddish purple in the fall?

3. Why do leaves turn yellow and orange in the fall?

4. If there is an early frost this fall, what might the maples look like? Why?

Answer key

Why Leaves Change Color

1. What makes leaves green?
Chlorophyll.
2. Which trees turn reddish purple in the fall?
Dogwoods and sumacs.
3. Why do leaves turn yellow and orange in the fall?
The leaves stop making food and the chlorophyll breaks down, so the green fades and the yellow and orange that were there all along can be seen.
4. If there is an early frost this fall, what might the maples look like? Why?
Sample answer: their red would be less bright, because an early frost makes the red weaker.