

Name:

Date:

Why Leaves Change Colour

During spring and summer, the leaves on many trees are green. But when autumn arrives, they can turn yellow, orange and red. This change happens because the days become shorter and cooler.



Leaves contain a green substance called chlorophyll. It helps trees use sunlight to make food. During the warmer months, trees produce plenty of chlorophyll, which makes their leaves look green.

In autumn, there is less sunlight and temperatures begin to drop. As a result, trees stop making as much chlorophyll. The green colour slowly disappears, allowing other colours that were already hidden in the leaves to become visible.

This is why many leaves turn yellow and orange. Some trees also produce red colours when sugars become trapped inside their leaves.

Eventually, trees stop sending water and nutrients to their leaves. This causes the leaves to dry out and fall to the ground.

The shorter, cooler days of autumn cause a chain of changes that transform green summer trees into colourful autumn ones.



1. What causes trees to stop making as much chlorophyll?

2. What happens when the green chlorophyll begins to disappear?

3. Why do many leaves turn yellow or orange during autumn?

4. What causes leaves to dry out and fall from the tree?

5. How do shorter and cooler days affect the leaves on many trees?



Answers

1. Less sunlight and cooler temperatures.
2. Other colours in the leaves, such as yellow and orange, become visible.
3. Because the green chlorophyll disappears, revealing colours that were already hidden in the leaves.
4. The tree stops sending water and nutrients to the leaves.
5. They cause the leaves to change colour, dry out and eventually fall from the trees.