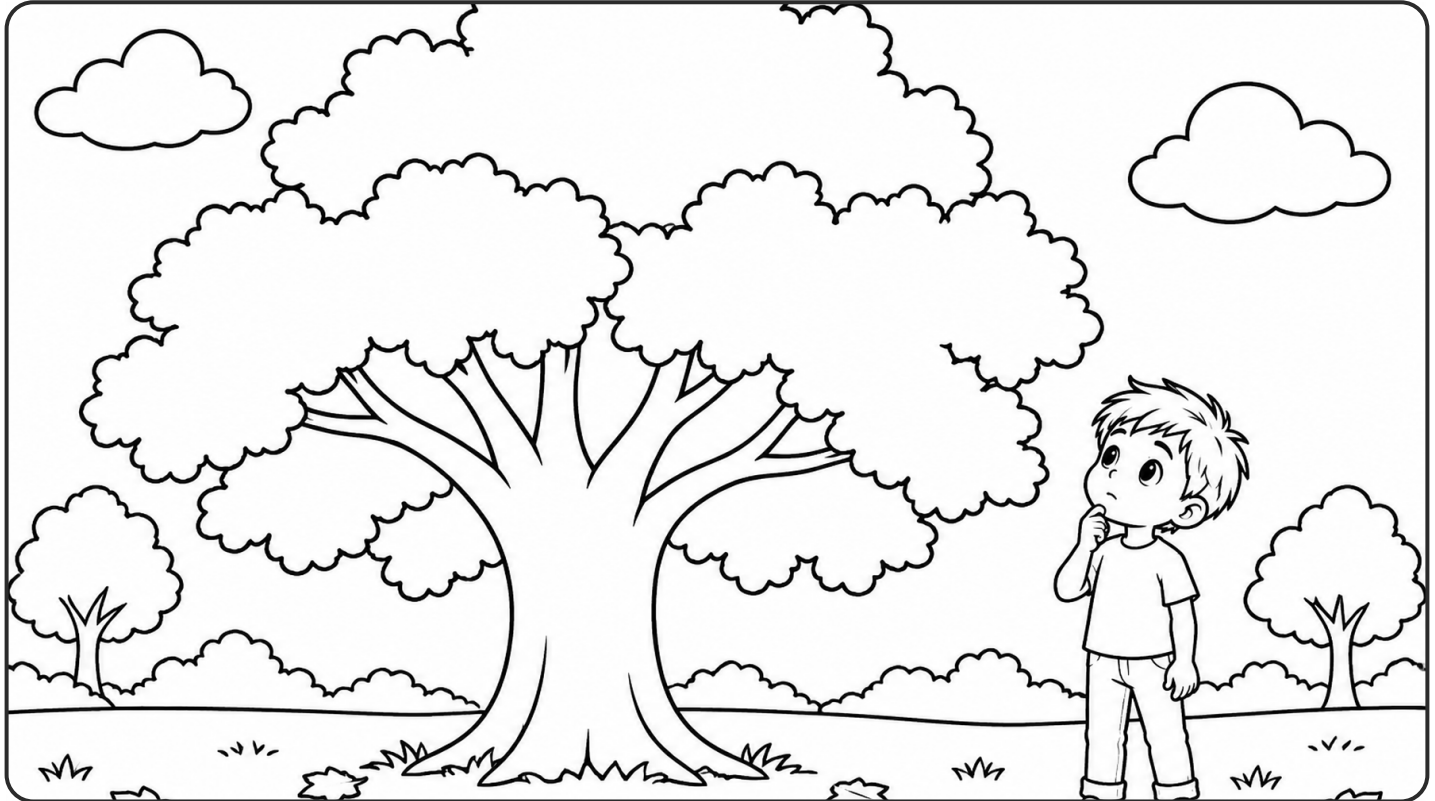


Why do leaves change color in autumn?



Why do some trees turn red, some turn yellow, and some stay green all year long?



Why?

1. In summer, every leaf is full of tiny green helpers.

They are called chlorophyll. They catch sunlight and make food for the tree. They are so green that they hide every other color.

2. When autumn comes, the green fades and the yellow shows up.

The days get shorter and the nights get colder, so the tree stops making new green helpers. Under the green, yellow and orange paint was hiding all summer. It is called carotenoids. Ginkgo and birch trees do this.

3. Red is a brand new paint.

It is called anthocyanin, and the leaf makes it in autumn! On sunny days, sugar gets stuck in the leaf and turns into red paint, like sunscreen for the leaf. Maple trees do this.

Try it! Color detective

You need: a tree that is changing color, and a grown-up

1. Next time you go outside, find a big tree that is changing color.
2. Look at the top, the sunny side, and the leaves hidden deep inside.
3. Can you spot where the colors start?

What happened? The top and the sunny side get the most sun and feel the cold first, so they change first. The color then spreads through the whole tree.

Video + more questions:
whywhywhykids.com/autumn



scan with a grown-up