

Name: \_\_\_\_\_

# Why Leaves Change Color

by Lydia Lukidis



Every fall, you know the drill. The leaves on the trees change color from green to red, orange, and yellow. The trees become explosions of vibrant color. Eventually, the leaves turn brown and fall off the trees. Of course you know the leaves change color before winter. But do you know why?



## Preview

Please log in to download the printable version of this worksheet.

time it rains, the tree is happy!

The leaves are made up of very small cells, and inside those cells are tiny formations called chloroplasts. Each chloroplast has a green chemical that gives it its color. That green chemical is called chlorophyll. The chlorophyll is very important because it allows the photosynthesis to take place.

When the light from the sun enters the leaf, the chlorophyll absorbs the light energy. Then, oxygen is released from the leaves. That oxygen goes into the air and helps us breathe. Also, the light energy is turned into sugar that the trees use for food. That sugar is called

glucose. Here's an easy way to remember this:



Now let's get back to why leaves change color. During the spring and summer, there's a lot of sunlight. But once fall and winter roll around, it doesn't stay light outside as long. So, the leaves don't get as much sunlight as they used to. The chlorophyll in the leaves starts to decrease. And remember, chlorophyll gives leaves their green color. So if there is less chlorophyll, the leaves lose their green color.



**Preview**  
Please log in to download  
the printable version of this worksheet.

Every tree is different, so the leaves change color at their own pace. And the colors depend on the temperature, the clouds, and the rain. It is different every fall. But, it is always magical.

## About the Author



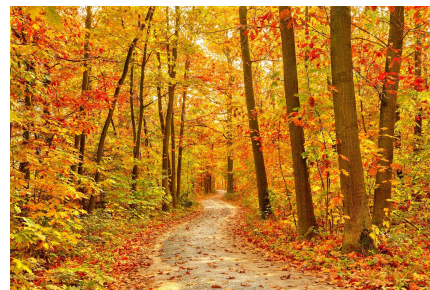
Lydia Lukidis is a published children's author with a multi-disciplinary background that spans the fields of literature, theater, and puppetry. Lydia's picture book, *Gerbs in the House: The Dilly Dally Bedtime Routine*, is now available. Find out if Mocha will ever get his silly son to sleep!

Lukidis, Lydia. *Gerbs in the House: The Dilly Dally Bedtime Routine* ISBN: [978-0-9917402-7-7](https://www.isbn-international.org/product/9780991740277)

Name: \_\_\_\_\_

# Why Leaves Change Color

by Lydia Lukidis



1. According to the information in the article, which of the following does a plant require for photosynthesis?

- a. sunlight, oxygen, and water
- b. carbon dioxide, water, and glucose
- c. water, oxygen, and carbon dioxide
- d. carbon dioxide, sunlight, and water

2. Identify two outputs of photosynthesis.

(Hint: One of them benefits humans, and the other is a sugar that plants use for food.)

\_\_\_\_\_ and \_\_\_\_\_



# Preview

Please log in to download the printable version of this worksheet.

---

---

---

5. Where do the red, orange, yellow, brown, and purple colors come from when the leaves begin to change in the fall?

---

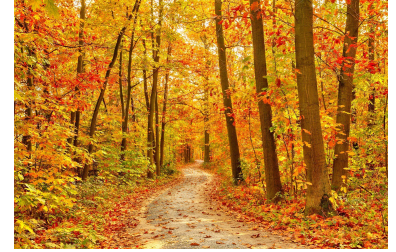
---

---

Name: \_\_\_\_\_

# Why Leaves Change Color

by Lydia Lukidis



The following terms are vocabulary words from the article. Match the vocabulary word with its correct definition by writing the corresponding letter on the line.

1. \_\_\_\_ vibrant
  2. \_\_\_\_ photosynthesis
  3. \_\_\_\_ chloroplast
- a. lessen in amount or intensity
  - b. small openings in a surface
  - c. a natural gas in the air that plants use for photosynthesis



## Preview

Please log in to download the printable version of this worksheet.

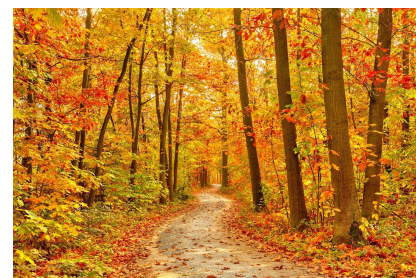
7. \_\_\_\_ pores
  8. \_\_\_\_ absorbs
  9. \_\_\_\_ cells
  10. \_\_\_\_ eventually
- g. gradually; not happening right away
  - h. a process by which green plants use sunlight to obtain food from carbon dioxide and water
  - i. a green pigment inside plants that helps them absorb sunlight for photosynthesis
  - j. a formation inside a cell that contains chlorophyll; where photosynthesis takes place

Name: \_\_\_\_\_

# Why Leaves Change Color

by Lydia Lukidis

In the article, "Why Leaves Change Color," you learned that the decrease of sunlight in the fall leads to the beautiful red, orange, yellow, purple, and brown colors we see on the trees all around us.



On the lines below, describe what you like about autumn where you live. Does your hometown experience a visible change of seasons where you can see the leaves change color? What other things do you enjoy about autumn?



## Preview

Please log in to download the printable version of this worksheet.

---

---

---

---

---

---

---

---

---

---

# ANSWER KEY

## Why Leaves Change Color

by Lydia Lukidis



1. According to the information in the article, which of the following does a plant require for photosynthesis? **d**
  - a. sunlight, oxygen, and water
  - b. carbon dioxide, water, and glucose

# Preview

Please log in to download  
the printable version of this worksheet.

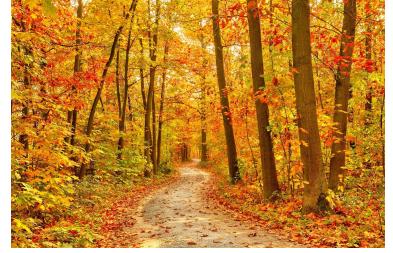


## ANSWER KEY

### Why Leaves Change Color

by Lydia Lukidis

The following terms are vocabulary words from the article. Match the vocabulary word with its correct definition by writing the corresponding letter on the line.



- d** vibrant                      **a.** lessen in amount or intensity
- h** photosynthesis                      **b.** small openings in a surface

# Preview

Please log in to download  
the printable version of this worksheet.



LD