

Click®

Trees, Please

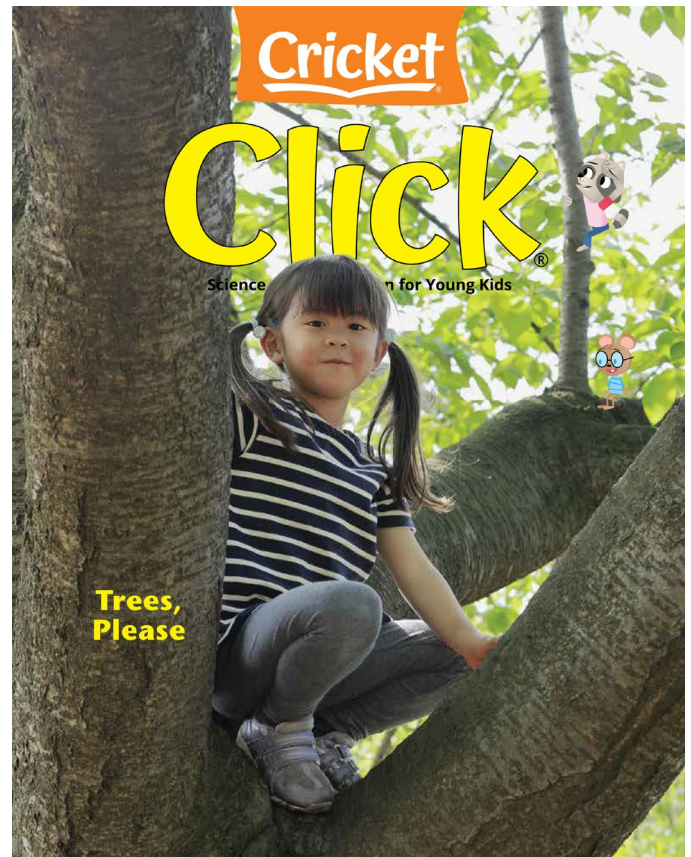
A majestic presence in nature, trees are responsible for perpetuating life in the natural world. Climb into this month's issue of CLICK magazine and explore the role that trees play in the ecosystem.

CONVERSATION QUESTION

Why are trees an important part of nature?

TEACHING OBJECTIVES

- Students will learn how trees offer food and shelter to insects and animals.
- Students will learn about various parts of a tree and how they contribute to its growth.
- Students will learn how chlorophyll performs important functions for plants and trees.
- Students will sequence incidents as occurring before or after a main event.
- Students will examine the structure and function of tree parts.
- Students will demonstrate an understanding of the color-changing process of leaves.
- Students will use specific interrogative words to practice critical thinking skills.
- Students will apply mathematical concepts to deconstruct the number 30.
- Students will write color-themed similes.



In addition to supplemental materials focused on core STEM skills, this flexible teaching tool offers vocabulary-building activities, questions for discussion, and cross-curricular activities.

SELECTIONS

- **Tree Story**
Expository Nonfiction, ~680L
- **Trees!**
Expository Nonfiction, ~560L
- **What Color Are Leaves?**
Expository Nonfiction, ~800L

Tree Story

pp. 8–13, Expository Nonfiction

This article teaches young students how a maple tree provides a habitat for forest creatures in all stages of its life. Simple text boxes and colorful photographs will attract early readers.



RESOURCES

Forest Friends: Sequencing Events

OBJECTIVES

- Students will learn how trees offer food and shelter to insects and animals.
- Students will sequence incidents as occurring before or after a main event.
- Students will use specific interrogative words to practice critical thinking skills.

KEY VOCABULARY

- **scampered** (p. 8) ran with quick, light steps
- **pecked** (p. 9) struck with the beak, or with a pointed object
- **scurried** (p. 9) moved quickly with small, short steps

ENGAGE

Conversation Question: Why are trees an important part of nature?

Use movement and imagination to motivate students to learn about trees. Have students stand up tall, plant their feet, and stretch out their “branches.” Use descriptive language to give the class movement directives (ex: “A gentle breeze is blowing,” “A violent storm suddenly blew through the woods”) and watch the classroom “forest” come alive!

INTRODUCE VOCABULARY

Post and discuss the three vocabulary words and their definitions. Ask students which two words have similar meanings (*scampered* and *scurried*). Introduce the term “synonym” (words that have exactly or nearly the same meaning). Point out that *scampered* and *scurried* are synonyms. Give students two minutes to brainstorm and share synonyms for the word *pecked*. (ex: *poked*, *jabbed*)

READ & DISCUSS

Direct students to notice that these questions all begin with the question word *who*. Explain that “who” questions ask about people and animals. Read the article aloud. Then have students work in small groups to answer the “who” questions together.

1. Who flew in and out of the tree all day?
2. Who liked the cool, damp spaces between the old tree and the forest floor?
3. Who discovered a hole in the tree and built his den?
4. Who built nests under the tree’s bark?
5. Who tunneled through the crumbling tree?

SKILL FOCUS: Sequencing Events

INSTRUCT: Review the article. Then ask students to identify the main event (lightning striking the old maple tree). Help students recognize that “Tree Story” is divided into two parts—incidents that happen before the main event, and incidents that happen after it. Then distribute the *Forest Friends: Sequencing Events* worksheet and read aloud the statements and directions. Tell students they will need to revisit the text to identify whether a sentence is describing something that happened before or after the lightning strike.

ASSESS: Review answers and discuss the question at the bottom of the worksheet (Click Question) as a class.

EXTEND

Logic Remind students that they answered “who” questions about the article. Explain that now they are going to write “what” questions about the article. Explain that “what” questions are used to ask about information. Model making up “what” questions. (“What happened when lightning struck the tree?”) Then have students work in pairs to write five “what” questions based on information from the article. Have pairs share questions with another pair and try to discuss and answer each other’s questions.

Forest Friends

Sequencing Events Gather information from the photographs and words in the article to determine if the sentence is describing something that happened before or after the lightning strike. Mark the sentence with a **B** (before) or **A** (after).

- _____ 1. Toadstools and mushroom appeared.
- _____ 2. Woodpeckers pecked for insects that were underneath the tree's bark.
- _____ 3. Earthworms chewed the rotting wood.
- _____ 4. Blue jays flew in and out of the tree all day.
- _____ 5. Moss and fungi covered the tree.
- _____ 6. A family of owls looked out from a hollow high in the tree.
- _____ 7. Squirrels scampered in the tree's branches.
- _____ 8. After many years, a tiny new tree sprouted.

CLICK QUESTION: This article explains how animals and insects use a tree when it is alive and after it rots and is no longer alive. How do people use living trees and trees that are no longer alive? Think about the activities that you can enjoy around a tree and how a tree can still be useful for humans even after it is no longer alive.

Trees!

pp. 14–17, Narrative Nonfiction

Beginning as a tiny seed, a tree grows to be one of the most magnificent natural wonders on the planet. Students will explore the parts of a tree that contribute to its amazing growth.



RESOURCES

It's TREE-mendous! Structure and Function

OBJECTIVES

- Students will learn about the various parts of a tree and how they contribute to its growth.
- Students will examine the structure and function of tree parts.
- Students will apply mathematical concepts to deconstruct the number 30.

KEY VOCABULARY

- **soil** (p. 16) the top layer of earth in which plants grow
- **tube** (p. 17) a long hollow object shaped like a pipe

ENGAGE

Conversation Question: Why are trees an important part of nature?

The very first sentence of the article asks, “What grows older, taller, and heavier than any living thing?” Pose this question to the students and list responses on the board. Then give them the answer by posting the title, “Trees!” alongside their guesses. Was anyone able to reason out the answer on their own?

INTRODUCE VOCABULARY

Post and discuss the two vocabulary words and definitions. Have students Think-Pair-Share with a partner. Give them the following brainstorming directives, one at a time:

- Discuss how you would use **soil** when planting seeds.
- List things that are shaped like **tubes**.

Emphasize the key words when they are revealed in the reading.

READ & DISCUSS

Read the article aloud, pausing when answers to the questions are revealed. Generate a discussion.

1. Explain how all trees begin their life.
2. How is the growth of trees different than the growth of animals?
3. What happens to the leaves of a maple tree in fall?
4. Why do branches stretch out from the trunk of a tree?
5. What is the oldest part of a tree?

SKILL FOCUS: Structure and Function

INSTRUCT: Elicit from students that the main idea of the article is to provide a detailed description of many different parts of a tree. Present the *It's TREE-mendous! Structure and Function* graphic organizer and tell students that they will be using information from the article to write and draw about the function of each tree part.

ASSESS: Circulate and have mini-conversations with students as they are working. Remedial readers may work with a partner to reread the text. Collect and review their work to further assess understanding.

EXTEND

Mathematics Have students locate the sentence on page 14 that states that Redwood trees in California can grow taller than a 30-story building. Have the class count out loud to 30. Next, ask students to count to 30 by 5s, and finally by 10s. Ask students how many 10s there are in 30. Allow the students to use manipulatives to show three groups of ten. Challenge students to find groups of ten in larger numbers.

It's TREE-mendous!

Structure and Function Revisit pages 16–17 of the article to study the text boxes and the diagram of a tree. Record the information on the chart.

Tree Part	What does it look like?	What does it do?
branches		
leaves		
bark		
roots		

Click® Teacher Guide: September 2021

What Color Are Leaves?

pp. 24–26, Expository Nonfiction

Young readers may be surprised to learn that the natural color of leaves is not green. This article explains how chlorophyll affects leaf color and helps to produce food for trees.



RESOURCES

Chilly Changes: Biochemical Process

OBJECTIVES

- Students will learn how chlorophyll performs important functions for plants and trees.
- Students will demonstrate an understanding of the color-changing process of leaves.
- Students will write color-themed similes.

KEY VOCABULARY

- **chlorophyll** (p. 24) the natural chemical in plants that gives them their green color and makes it possible for them to make food from sunlight, water, and air

ENGAGE

Conversation Question: Why are trees an important part of nature?

Help students jump into autumn by making a fall wreath for the classroom door. Supply students with a piece of white drawing paper, a leaf stencil, and crayons. Ask students to create a realistic leaf, coloring the entire surface of their white leaf. Discuss the colors that students chose, then fashion the leaves into a circle and hang this seasonal wreath on the door to welcome fall.

INTRODUCE VOCABULARY

Post the key vocabulary word and definition. The article tells readers that the word *chlorophyll* comes from the Greek words that mean “green” and “leaf.” Articulate the word *chlorophyll* and have students repeat the pronunciation. Ask students to identify which two letters form the “f” sound in the word (*ph*). Invite students to share other words they know where *ph* creates the “f” sound.

READ & DISCUSS

Reinforce comprehension of the details in the article by using the following prompts to direct discussion.

1. Why is chlorophyll so important to plants?
2. Where do trees store their food when winter comes?
3. Why do leaves turn colors?
4. Why do you see fewer red leaves in years where the fall season is rainy or cloudy?
5. What happens if you cover a patch of grass so that sunlight can't reach it? Why?

SKILL FOCUS: Biochemical Process

INSTRUCT: Review the information from the article that describes how leaves look different in different seasons due to a process facilitated by changes in temperature and daylight. Remind students that the article was written to teach readers the role that chlorophyll plays in the changing of the colors. Introduce the *Chilly Changes: Biochemical Process* worksheet. Instruct students to unscramble the season word and then draw a picture to accompany the sentence.

ASSESS: Review graphic organizers with the class and discuss.

EXTEND

Language Arts Brainstorm a list of leaf colors: green, orange, yellow, red, purple, brown. Tell students they are going to write describing sentences using color words. Display the following sentence on the board: My leaf is as green as a frog. Talk about the comparison of the leaf and the frog. Explain that this kind of comparison is called a simile. Have students choose a color and then use the sentence frame below to write and illustrate five simile sentences. Combine finished work into a class book titled *A Season of Similes*.

My leaf is as _____ as a _____.

Chilly Changes

Biochemical Process Unscramble the name of each season and write it on the line. Draw a picture to show how leaves would look during that season.

This is a picture of a tree in **FLAL**.

Season: _____

This is a picture of a tree in **WNIERT**.

Season: _____

This is a picture of a tree in **SINRGP**.

Season: _____

This is a picture of a tree in **SERMMU**.

Season: _____