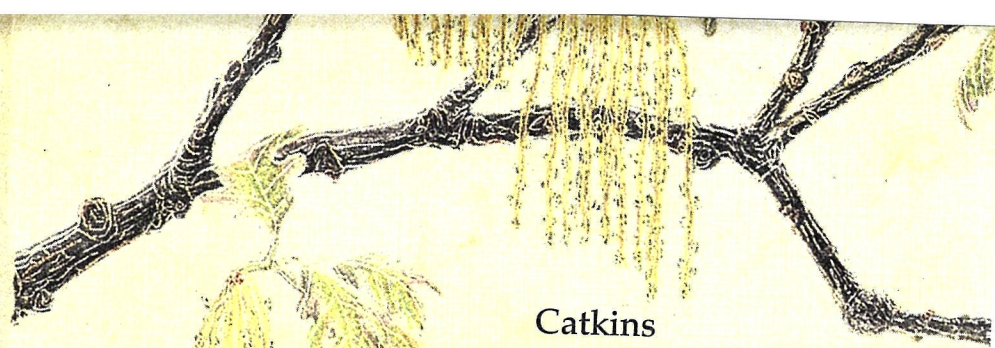
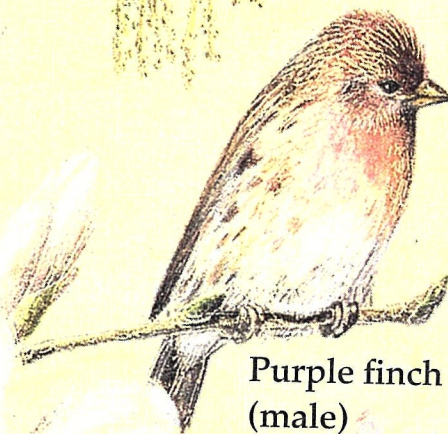


Nectar-eating bat

Calabash tree



Catkins

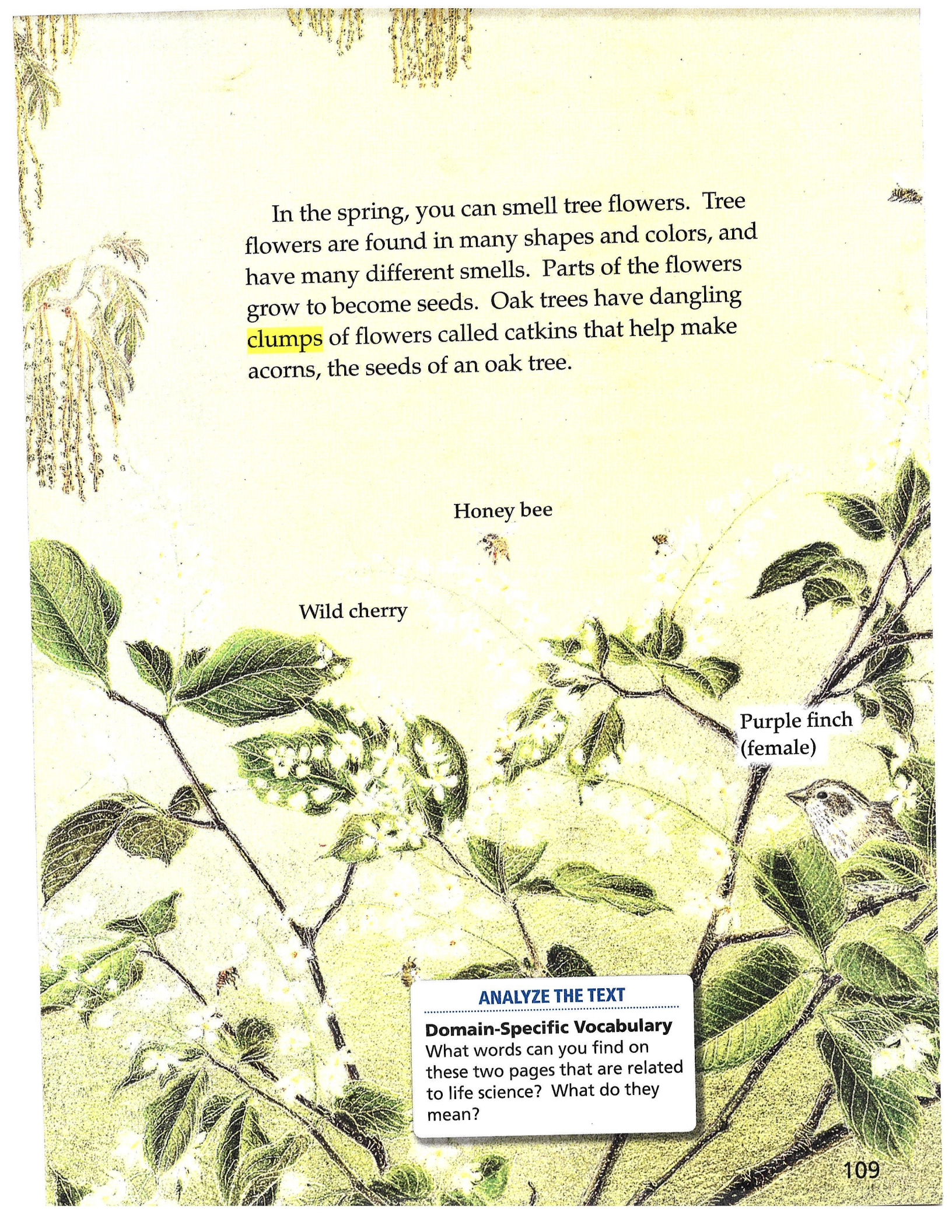


Purple finch
(male)



Saucer
magnolia

Birds, insects, and even bats are attracted to flowers to drink their sweet juices. When they brush the flowers, the animals get a powder called **pollen** on them. The animals carry the pollen to other flowers. When the pollen mixes with certain parts of the flowers, seeds grow. Wind also helps pollinate flowers.



In the spring, you can smell tree flowers. Tree flowers are found in many shapes and colors, and have many different smells. Parts of the flowers grow to become seeds. Oak trees have dangling **clumps** of flowers called catkins that help make acorns, the seeds of an oak tree.

Honey bee

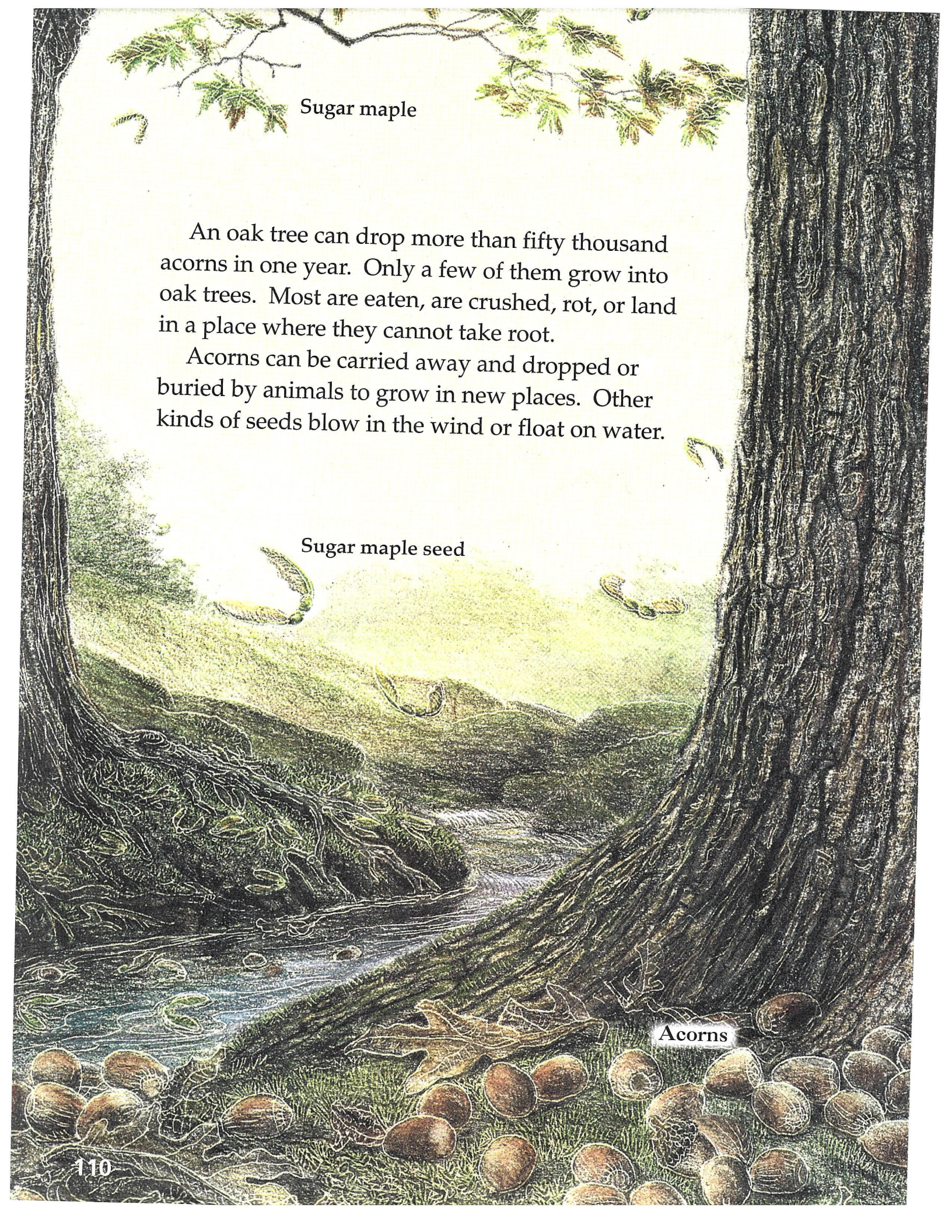
Wild cherry

Purple finch
(female)

ANALYZE THE TEXT

Domain-Specific Vocabulary

What words can you find on these two pages that are related to life science? What do they mean?



Sugar maple

An oak tree can drop more than fifty thousand acorns in one year. Only a few of them grow into oak trees. Most are eaten, are crushed, rot, or land in a place where they cannot take root.

Acorns can be carried away and dropped or buried by animals to grow in new places. Other kinds of seeds blow in the wind or float on water.

Sugar maple seed

Acorns



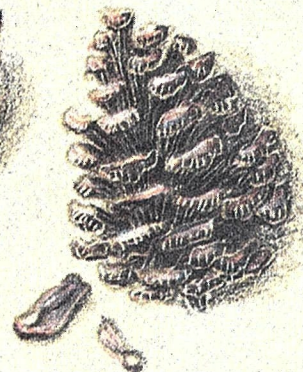
Gray
squirrel

*Different kinds of trees
make seeds with
different coverings.
Nuts, cones, and fruits
all have seeds inside.*

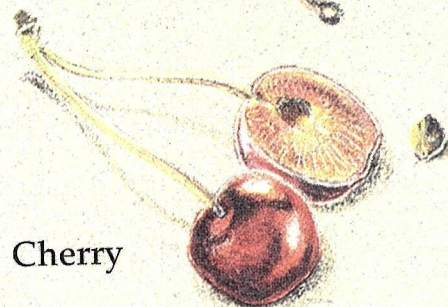
Brazil nut



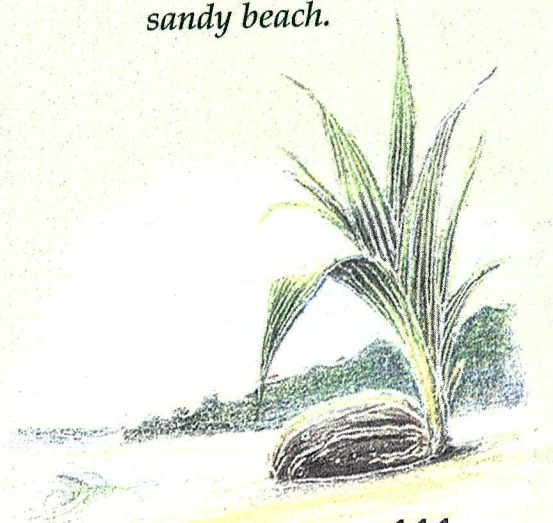
Mountain
pine cone



Cherry



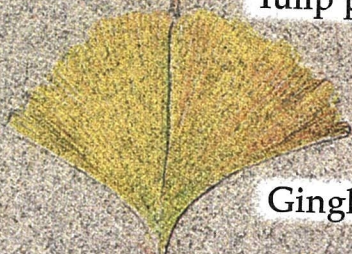
*Coconuts are seeds of
a palm tree. A coconut
can float across the
ocean and sprout on a
sandy beach.*



*Autumn is a great
time to collect leaves.
Each tree has its own
special color.*



Tulip poplar



Ginkgo



Big-tooth
aspen



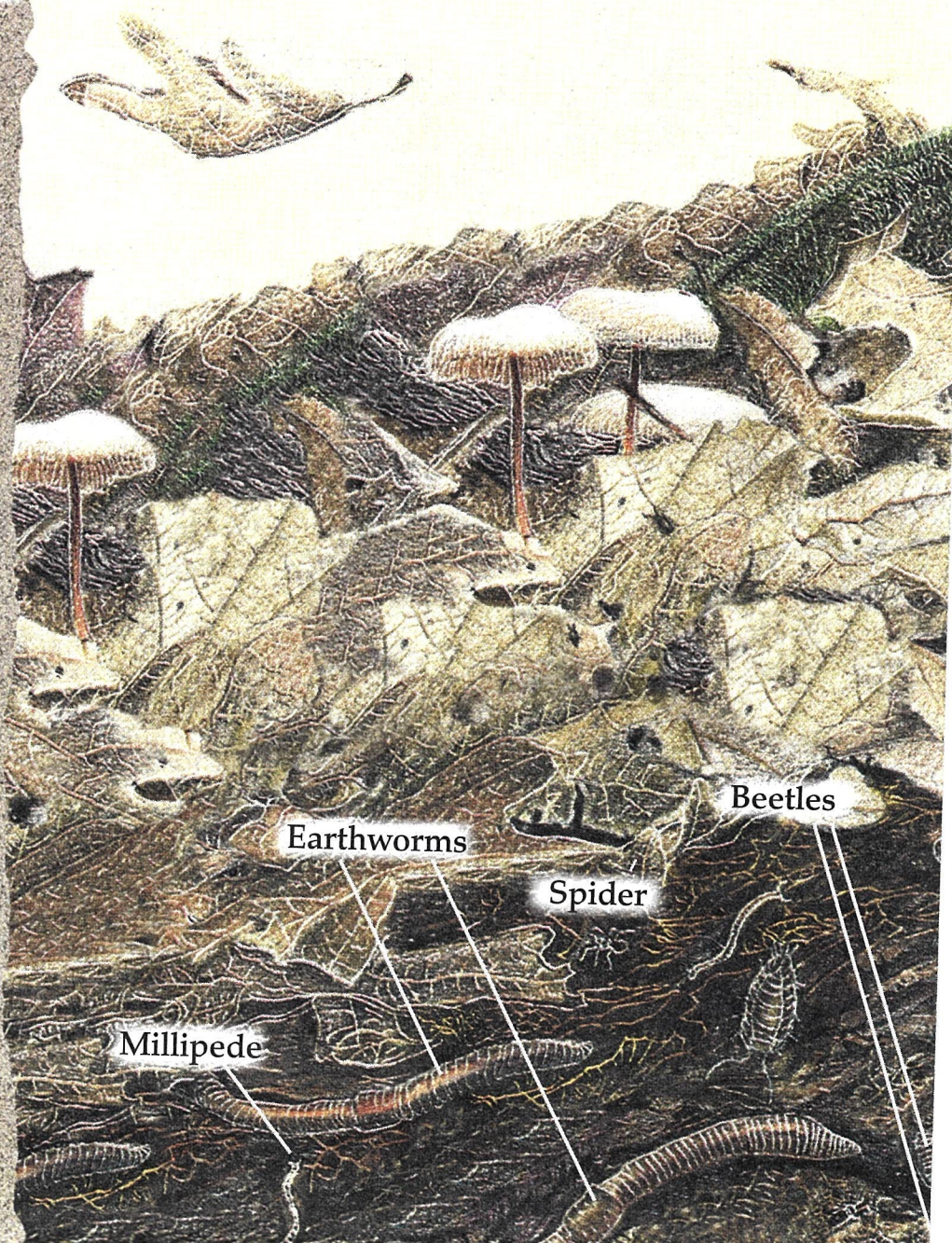
Sweet
gum

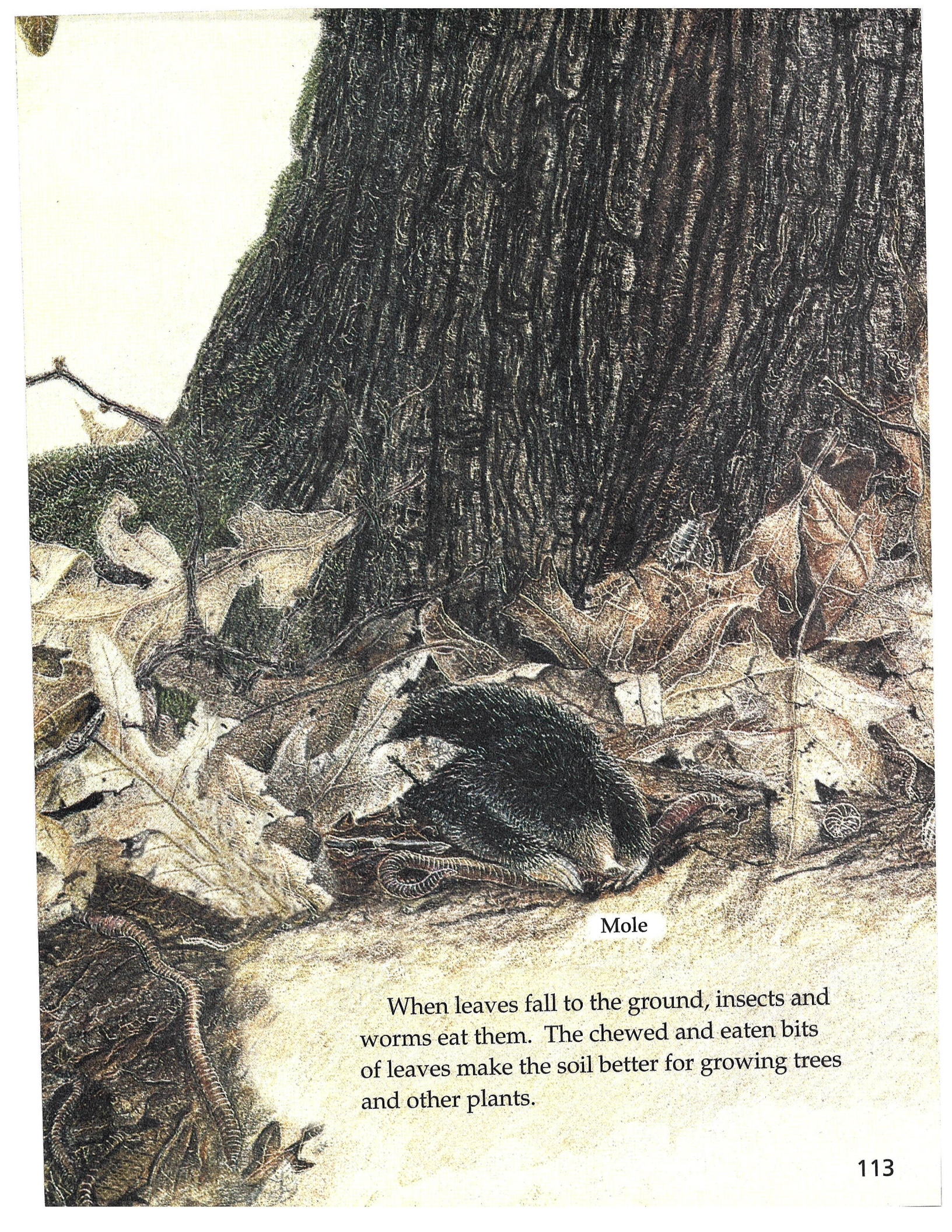


Pin oak

In cool climates, trees stop growing in autumn. The leaves of many trees stop making sugary food for the tree, and they lose their green color. Then you can see the red, brown, yellow, and orange colors that are also in the leaves.

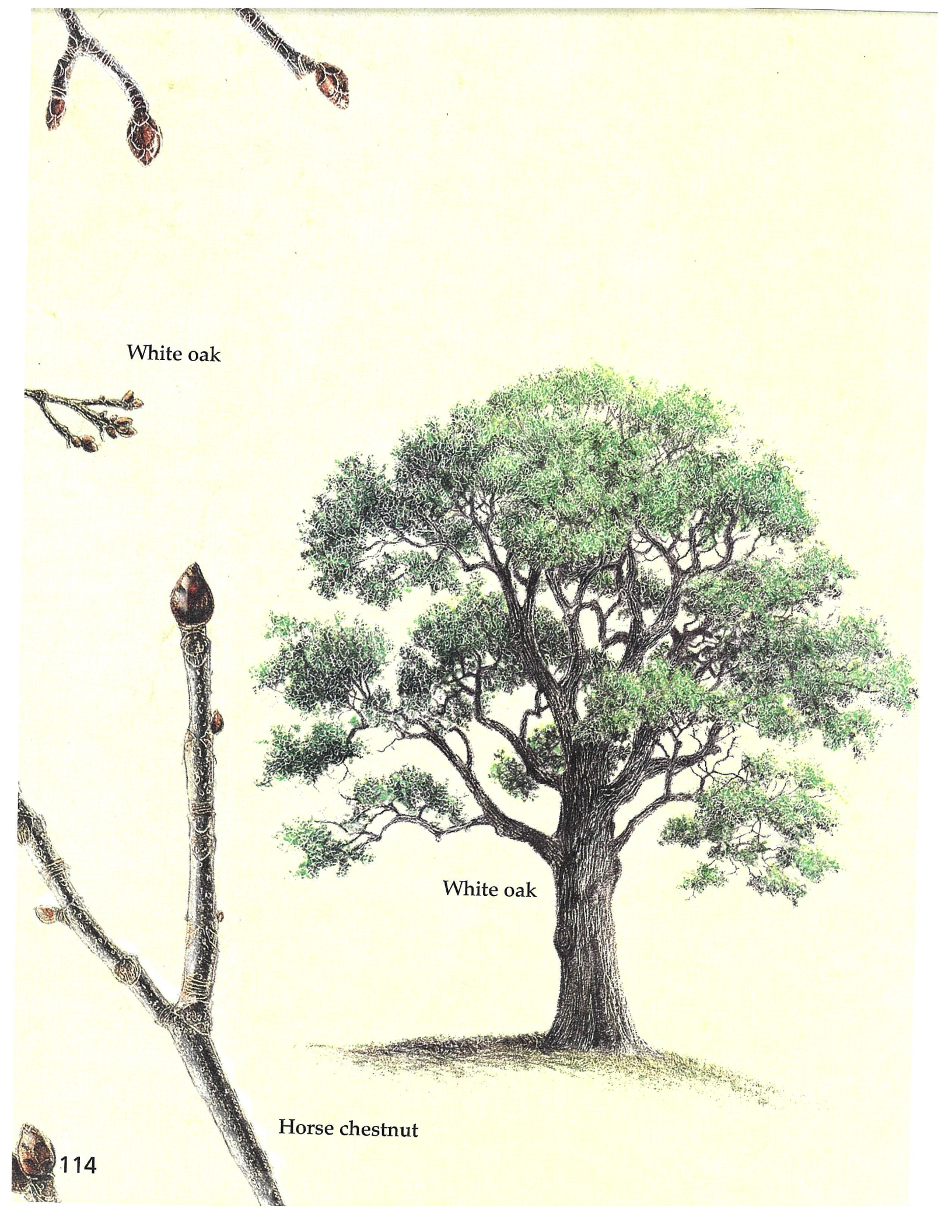
Pine trees and some other trees have needles or leaves that do not change color in autumn.





Mole

When leaves fall to the ground, insects and worms eat them. The chewed and eaten bits of leaves make the soil better for growing trees and other plants.



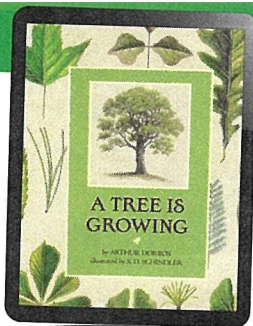
White oak

White oak

Horse chestnut

Trees rest in the cold of winter, and their branches are bare. They may look as if they are dead. But look closely and you can see small buds that will become leaves and flowers in the spring.

In the spring, listen to the wind rustling the leaves. The trees are growing again.



Dig Deeper

Use Clues to Analyze the Text

Use these pages to learn about Text and Graphic Features and Domain-Specific Vocabulary. Then read *A Tree Is Growing* again to apply what you learned.

Text and Graphic Features

Informational text, such as *A Tree Is Growing*, gives facts and details about a topic. Besides the main text, readers can find information in other ways. Sidebars are a **text feature** next to the main text. A sidebar gives more details about a part of the main text and may also have pictures. **Graphic features** include pictures and diagrams that help to explain the main text. Labels identify parts of pictures and diagrams or show how something works.

Look back at page 96 in *A Tree Is Growing*. Here, labeled pictures show different kinds of leaves. On page 99, a diagram shows how water travels up a tree.

Use a chart like the one below to help you identify each feature and its purpose.

Text or Graphic Feature	Page	Purpose

Domain-Specific Vocabulary

A Tree Is Growing provides scientific information about how trees grow. The selection includes special words that are a part of the **domain**, or subject, of science. Use context clues to figure out what a science word means.

In the sidebar on page 104 is the word *cambium*. The text on page 105 says that cambium is "a layer of growing bark." The text also explains the words *xylem* and *phloem*.

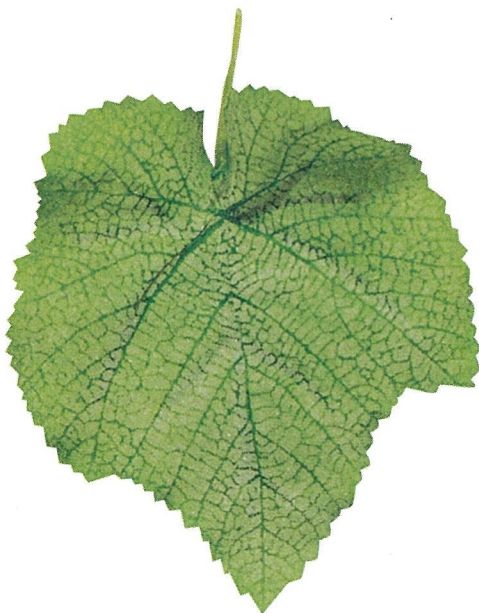


Your Turn

RETURN TO THE ESSENTIAL QUESTION



Review the text with a partner to prepare to discuss this question: *What are some differences among types of trees?* As you discuss, take turns reviewing and explaining the key ideas in your discussion. Use text evidence to support your ideas.



Classroom Conversation

Continue your discussion of *A Tree Is Growing* by using text evidence to explain your answers to these questions:

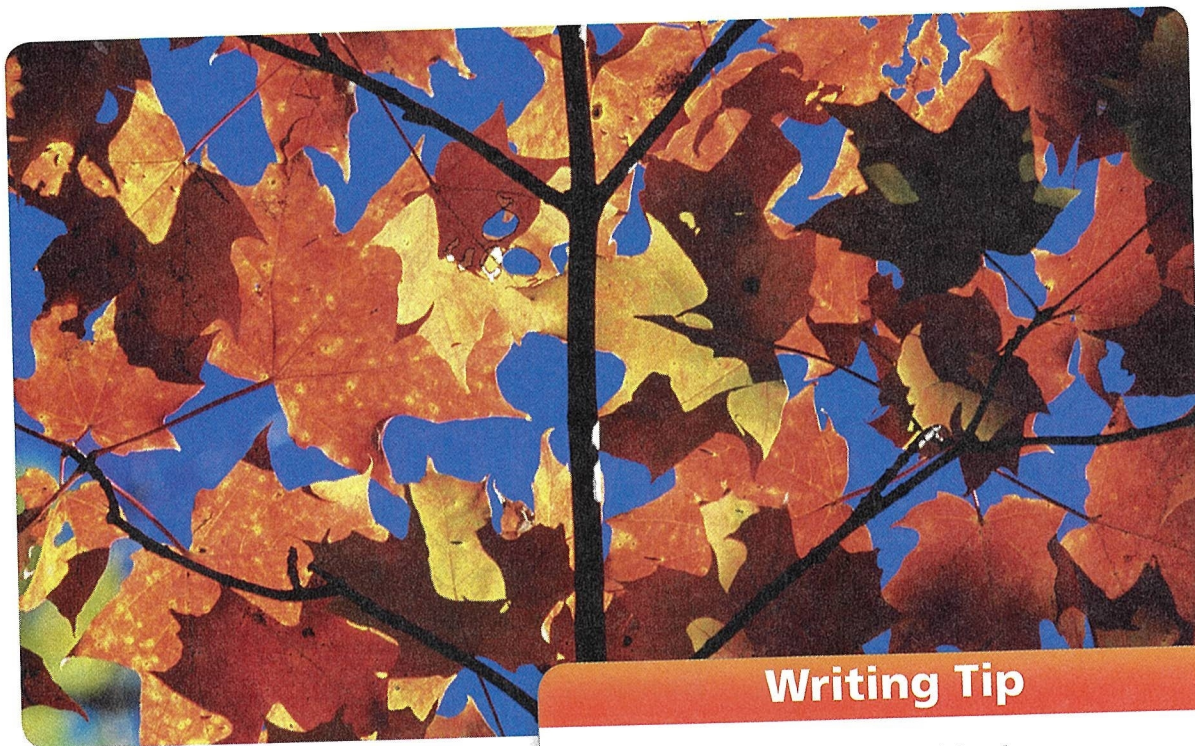
- 1 Why is it difficult to tell the age of a tree in the tropical rain forest?
- 2 Why do some trees look dead in the winter? What is really happening to these trees?
- 3 What kinds of trees grow where you live? What do you know about those trees?

Performance Task

WRITE ABOUT READING



Response Think about what you learned in *A Tree Is Growing*. How do you feel about trees now? Use text evidence and your own ideas to write a poem about trees. Share your poem by reading it to a partner.

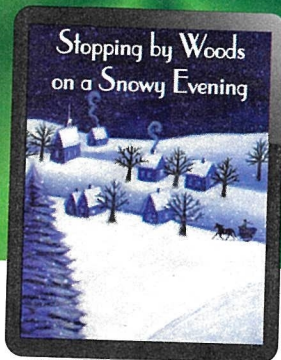


Writing Tip

Descriptive words will help your readers picture what you write about. Think of colorful adjectives and verbs to describe your trees.

Lesson 18

POETRY



✓ GENRE

Poetry uses the sound and rhythm of words to show images and express feelings.

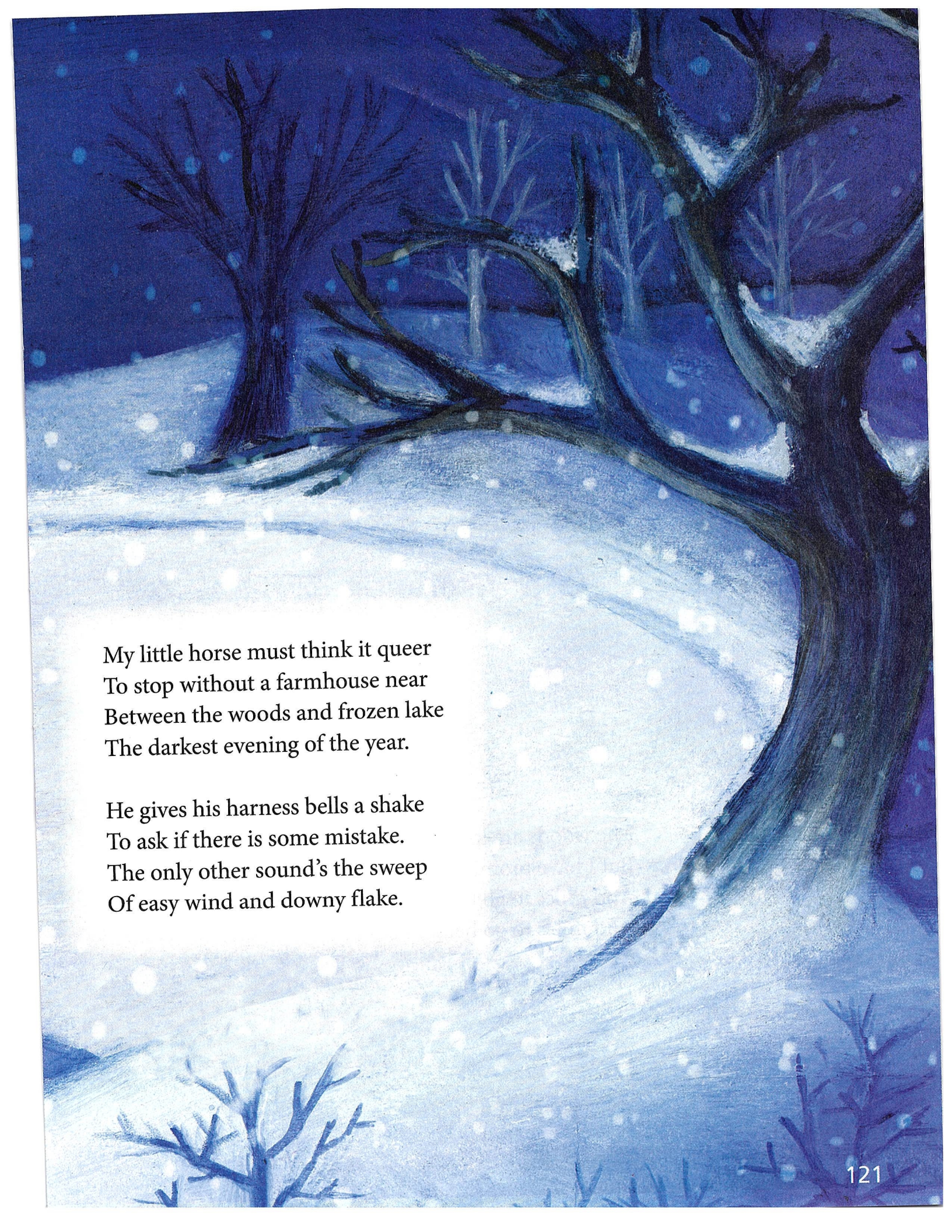
✓ TEXT FOCUS

A poem can be broken into **stanzas**, or groups of lines. Often, each stanza follows the same rhyming pattern.

Stopping by Woods on a Snowy Evening

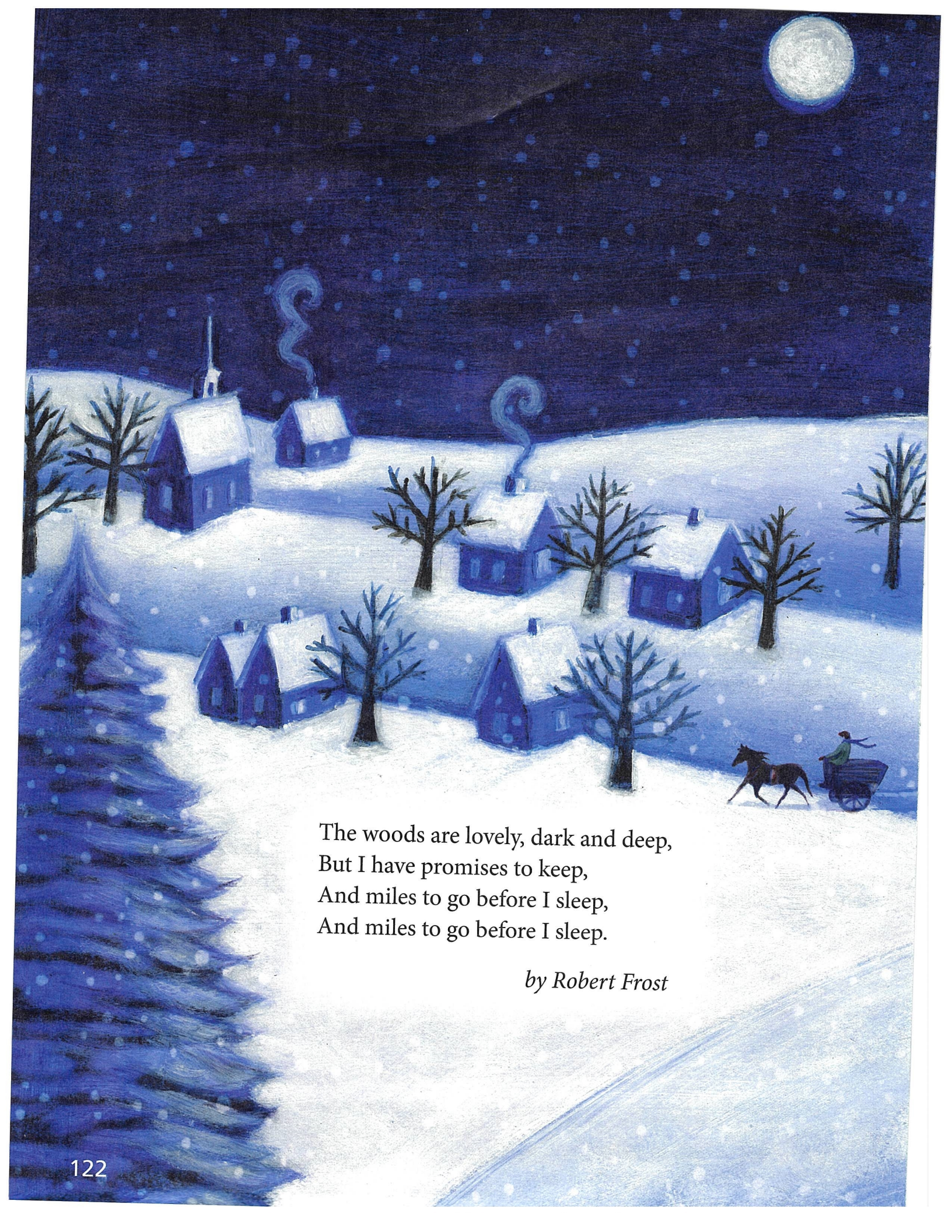


Whose woods these are I think I know.
His house is in the village though;
He will not see me stopping here
To watch his woods fill up with snow.

A full-page illustration of a winter night. The scene is dominated by a large, dark, leafless tree on the right side, its branches reaching across the frame. Snow is falling heavily, depicted as numerous small, white, circular flakes against a deep blue and purple night sky. The ground is covered in a thick layer of snow, with some faint tracks visible. In the background, other bare trees are silhouetted against the falling snow. The overall mood is quiet and cold.

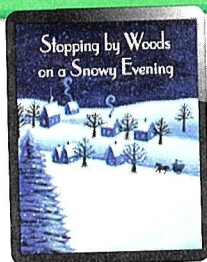
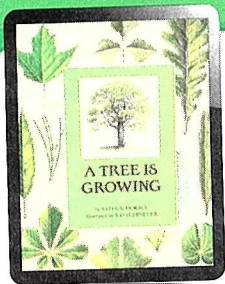
My little horse must think it queer
To stop without a farmhouse near
Between the woods and frozen lake
The darkest evening of the year.

He gives his harness bells a shake
To ask if there is some mistake.
The only other sound's the sweep
Of easy wind and downy flake.



The woods are lovely, dark and deep,
But I have promises to keep,
And miles to go before I sleep,
And miles to go before I sleep.

by Robert Frost



Compare Texts

TEXT TO TEXT

Compare Seasons Think about how the woods in “Stopping by Woods on a Snowy Evening” look to the poet. Use evidence from *A Tree Is Growing* to think about how those trees would look during the spring. With a partner, write a paragraph to compare and contrast the trees in winter and spring.



TEXT TO SELF

Discuss Living Things In what ways are you like a tree? In what ways are you different? Work in a small group. Take turns telling how you are like a tree and how you are different.



TEXT TO WORLD

Talk About Poems With a partner, compare and contrast “Stopping by Woods on a Snowy Evening” and another poem, such as “A Bat Is Born” from Lesson 6. In your discussion, use poetry terms such as *stanza* and *rhyme*. If possible, record yourself reading each poem.



Grammar

Using the Verb *be* and Helping Verbs The verbs *am*, *is*, *was*, *are*, and *were* are forms of the verb *be*. They do not show action. They tell what someone or something is or was.

Subject	Present Tense	Past Tense
I	am	was
you	are	were
he, she, it	is	was
singular noun (<i>tree</i>)	is	was
plural noun (<i>trees</i>), we, they	are	were

Sometimes the words *has* and *have* help other verbs to show past time. *Has* and *have* are called **helping verbs**.

Subject	Helping Verb
he, she, it	He has watched the trees grow.
I, you, we, they	They have grown very tall.

Try This!

Write each sentence correctly using the verb form that best completes each sentence.

- 1 I (is, am) a great tree climber.
- 2 The girls (has, have) picked apples.
- 3 They (was, were) at the orchard yesterday.

When two sentences have the same predicate, you can put the sentences together. Join the two subjects and use the word *and* between them. You may have to change the forms of the verbs *be* and *have* to go with their subjects.

Short Sentences



The Nile River is long.



The Amazon River is long.

Longer, Smoother Sentence



The Nile River and the Amazon River are long.

Connect Grammar to Writing

As you revise your problem-and-solution paragraph, try to combine subjects to make longer sentences. Make sure that the verb form goes with the subject.

- ▶ Writing as a Process: Plan and Draft
- ▶ Writing as a Process: Revise and Edit



Opinion Writing

✓ Conventions A problem-and-solution paragraph presents a problem and ideas about how to solve it. Using a variety of sentence types and clear, exact words will make your writing flow and help readers understand how you feel about a problem and what you would do to fix it.

Tanya wrote to a newspaper about her idea for helping her town. When she revised her paragraph, she combined two simple sentences into a compound sentence. She also changed words to make her ideas clearer.

Writing Checklist

- ✓ Conventions**
Did I use both simple and compound sentences?
- ✓ Purpose**
Did I stay focused on presenting a solution?
- ✓ Organization**
Did I clearly state the problem and solution?
- ✓ Evidence**
Did I include details that support my ideas?
- ✓ Elaboration**
Did I use clear, exact words?
Do I sound sure of my ideas?

Revised Draft

^{historic}
Since the ~~big~~ snowstorm last fall,
our town park has looked sad and bare.
Many huge branches were snapped off^{, and}
~~Trees~~ were uprooted. ^{Twenty inches of snow} ~~The storm~~ turned
our town from a Tree City to
a No-Tree City.

Final Copy

Help Our Tree City

by Tanya Petrov

Since the historic snowstorm last fall, our town park has looked sad and bare. Many huge branches were snapped off, and trees were uprooted. Twenty inches of snow turned our town from a Tree City to a No-Tree City. Visitors pass the park when they come here. As it is now, the park looks like we don't care about trees. I believe our town can be a Tree City again. Arbor Day is the last Friday in April. On that day, our city can have a "Plant a Tree" event. I have talked to the teachers and students in my school. They are ready to help plan the event and plant the trees. Visitors will see all the new trees and know that our town loves trees.

Reading as a Writer

Why did Tanya replace "The storm" with "Twenty inches of snow"? Where can you add more exact words in your paragraph?

I combined two simple sentences into a compound sentence. I added some exact words to make my ideas more detailed and clear.

