

About the Book

Text Type: Nonfiction/Informational Page Count: 24 Word Count: 1,546

Book Summary

Fungus Among Us is a book about the thousands of different types of fungi that scientists have identified. Many scientific terms are explained and defined, such as *kingdoms* and *photosynthesis*. The book highlights fungi that are harmful as well as those that are useful. It also points out some of the obscure forms of fungi in addition to the more obvious types. Photographs and diagrams support the text.

About the Lesson

Targeted Reading Strategy

- Ask and answer questions


Objectives

- Use the reading strategy of asking and answering questions to understand text
- Identify details to compare and contrast different types of fungi
- Understand the use of a dash as punctuation
- Recognize and use synonyms

Materials

Green text indicates resources available on the website

- Book—*Fungus Among Us* (copy for each student)
- Chalkboard or dry erase board
- Dictionaries and thesauruses
- [KWLS, compare and contrast, dash, synonyms worksheets](#)
- [Discussion cards](#)

 Indicates an opportunity for students to mark in the book. (All activities may be demonstrated by projecting the book on interactive whiteboard or completed with paper and pencil if books are reused.)

Vocabulary

- **Content words:** *antibiotic, bacteria, budding, buttons, cap, decompose, enzymes, fruiting body, fungi, fungicides, germinate, gills, hyphae, infectious, kingdoms, lichen, mildew, mold, mycelium, mycologist, nutrients, organisms, photosynthesis, reproduce, species, sporangia, spores, stalk, yeast*

Before Reading

Build Background

- Write the word *fungus* on the board. Show students examples of different types of fungi pictured in the text. Ask them to describe what they see and discuss what different types of fungi they may already know about, such as molds, mushrooms, or mildews.
- Create a KWLS chart on the board and hand out the [KWLS worksheet](#). Review or explain that the *K* stands for knowledge we know, the *W* stands for information we want to know, the *L* stands for the knowledge we learned, and the *S* stands for what we still want to know about the topic. As various topics are discussed, fill in the first column (*K*) on the board with information students know about the topic. Have students complete the same section of their KWLS chart.
- Ask students what they would like to know about fungi. Have them fill in the second section (*W*) of their chart. Write their questions on the class chart.

Preview the Book

Introduce the Book

- Give students their copy of the book. Guide them to the front and back covers and read the title. Have students discuss what they see on the covers. Encourage them to offer ideas as to what type of book it is and what it might be about.
- Show students the title page. Discuss the information on the page (title of book, author's name). Point out the glossary and index; ask volunteers to explain the uses of each.

Introduce the Reading Strategy: **Ask and answer questions**

- Discuss with students how having prior knowledge about the topic, and asking and answering questions while reading, can help readers understand and remember the information in a book.
- Direct students to the table of contents. Remind them that the table of contents provides an overview of the information in a book and how it is organized. After previewing the table of contents, use it to model asking questions.
Think aloud: I can use the table of contents to think of questions I would like to have answered about fungi. For example, chapter 2 is titled "The Many Kinds of Fungi." This makes me wonder how many different kinds of fungi exist in the world and what they are called. I'll have to read the book to find out. I'll write this question on the chart.
- Have students look at the other chapter titles. Have them write any questions they have based on the covers and table of contents in the *W* section of their KWLS chart.
- Have students preview the rest of the book, looking at illustrations, photos, and captions. Invite students to read through the glossary and index. Have them add any additional questions they might have on their KWLS chart. Invite students to share their questions aloud. Write shared questions on the class chart.
- As students read, encourage them to use other reading strategies in addition to the targeted strategy presented in this section.

Introduce the Comprehension Skill: **Compare and contrast**

- Explain to students that one way to understand concepts in a book is to tell how information is alike and different.
- Read pages 4 and 5 aloud while students follow along silently. Model how to compare and contrast using clues from the text.
Think-aloud: In this chapter, I learned that fungi are similar to and different from plants. Fungi and plants are both living things. However, I read that plants carry out a process called photosynthesis to acquire their food, while fungi absorb nutrients by releasing enzymes into their surroundings.
- Model how to compare and contrast information using a Venn diagram. Draw a Venn diagram on the board. Label the left circle *Fungi* and the right circle *Plants*. Explain that information telling how fungi and plants are similar is written where both circles overlap. Information that is only true of fungi is written in the left side of the left circle. Information that is only true of plants is written in the right side of the right circle.
- Have students identify other similarities and differences between fungi and plants based on the information on pages 4 and 5. Write this information on the Venn diagram.

Introduce the Vocabulary

- As students preview the book, ask them to talk about what they see in the photos and diagrams. Reinforce the vocabulary words they will encounter in the text.
- Explain to students that sometimes they will not find any context clues that define an unfamiliar word. Model how students can use the glossary or a dictionary to locate a word's meaning. Have a volunteer read the definition for *organisms* in the glossary. Have students follow along on page 4 as you read the sentence in which the word *organisms* is found to confirm the meaning of the word.

Lesson Plan *(continued)*

Fungus Among Us



- Write the word *organisms* on the board. List examples of organisms mentioned on page 4, such as mold, mushrooms, and yeast. Ask students to give examples of other organisms they may know of and list them on the board.
- Have students locate each of the remaining content vocabulary words in the glossary. Read and discuss their definitions as a class.

Set the Purpose

- Have students think about what they already know about fungi as they read the book to find answers to their questions, and write what they learned in the *L* section of their KWLS chart.

During Reading

Student Reading

- **Guide the reading:** Have students read from page 6 to the end of page 9. Remind them to look for information about fungi that will answer questions on their KWLS chart. Encourage students who finish early to go back and reread.
- When students have finished reading, have them circle any questions on their KWLS chart that were answered and write any new questions that were generated.
- Model answering a question and filling in the third section (*L*) on the KWLS chart.
Think-aloud: I wanted to know how many different types of fungi there are and what some of them are named. I found out that scientists have identified more than 100,000 species of fungi. Kinds of fungi include yeasts, molds, mildew, and mushrooms. I noticed that the third chapter is titled "Fungi That Are Harmful." I wonder if there are any yeasts, molds, mildew, and mushrooms that are harmful to eat. I will write this question on my chart.
- Have students write answers to the questions they circled in the *L* section on their KWLS chart. Invite them to share the information they learned and the questions they generated as they read the book. Record shared responses on the class KWLS chart.
- Review with students the information about yeast and mold on pages 7 and 9. Discuss any similarities and differences between these two kinds of fungi (similarities: are fungi, reproduce by spores, can be in food; differences: yeasts are single-celled, but molds are multi-celled). Write this information in a Venn diagram on the board.
- **Check for understanding:** Have students read to the end of page 13. Have them write answers they found while reading in the *L* section of their KWLS chart and additional questions they raised in the *W* section. Invite them to share the information they learned and the questions they generated as they read pages 11 through 13. Write shared responses on the class KWLS chart.
-  Have students work with a partner to compare and contrast mildew and yeast. Have them underline the information in their book. Discuss their responses and write the information on a class Venn diagram on the board.
- Have students read the remainder of the book. Remind them to look for and write answers to their KWLS chart questions, as well as to look for information to compare and contrast. Encourage them to add new questions they might have to their chart as they read.
-  Have students make a question mark in their book beside any word they do not understand or cannot pronounce. Encourage them to use the strategies they have learned to read each word and figure out its meaning.

After Reading

- Ask students what words, if any, they marked in their book. Use this opportunity to model how they can read these words using decoding strategies and context clues.

Reflect on the Reading Strategy


- **Think-aloud:** *I wanted to know if any types of yeasts, molds, mildews, or mushrooms were harmful to eat. I learned that although it is safe to eat some kinds of mushrooms and mold, other kinds contain poisons that can make you very sick. I read that some kinds of molds are used to make certain types of cheese. I also learned that a harmful fungus called blight killed almost all of the chestnut trees in the United States in the early 1900s.*
- Ask students to share questions they added to their KWLS chart while reading, and ask them what questions were answered (or not answered) in the text. Have students write answers they found while reading under the *L* column on their [KWLS worksheet](#).
- Reinforce that asking questions before and during reading, and looking for the answers while reading, keeps readers interested in the topic. It also encourages them to keep reading to find answers to their questions and helps them understand and enjoy what they have read.
- Point out to students that all of their questions may not have been answered in this text. Brainstorm other sources they might use to locate additional information to answer their questions. Invite students to fill in the final section (*S*) on their worksheet with information they would still like to know about fungi.

Reflect on the Comprehension Skill

- **Discussion:** Review with students how information is organized in a Venn diagram on the board. Have students work with a partner to identify similarities and differences between athlete's foot and ringworm. Have them write the information in a Venn diagram on a separate piece of paper.
- **Independent practice:** Introduce, explain, and have students complete the [compare-and-contrast worksheet](#) by comparing mold with another kind of fungus from the book. If time allows, discuss their answers.
- **Enduring understanding:** This book educates readers about the different types of fungi and their many characteristics. Now that you know this information, why is knowing about fungi important?

Build Skills

Grammar and Mechanics: Dash

- Review or explain that a dash (—) is a punctuation mark used to indicate a break or omission. It is also used to clarify information within a sentence.
 - Direct students to page 10 in the book. Write the following sentence on the board: *Mildews are fungi that are parasitic—that is, they live in or on organisms that they feed on.* Ask students how the dash is used in this instance (to clarify what parasites are).
 - Direct students to page 18. Write the following sentence on the board: *It is difficult to tell the poisonous kinds from the nonpoisonous kinds—unless you are a very experienced mushroom hunter.* Ask students how the dash is used in this instance (to add a thought to the end of the sentence).
 - Point out to students the difference between a dash and a hyphen. Have students turn to page 7 and locate the word *bread-making*. Review or explain that hyphens are used in compound adjectives, and that hyphens are shorter in length and are used to connect two words.
 - Direct students to page 10 in the book. Write the following sentence on the board: *The umbrella-like parts that you see above the surface live only for a few days—just long enough to produce spores.* Ask a volunteer to come to the board and circle the dash (after the word *days*). Ask students how the dash is used in this instance (to clarify how long the umbrella-like parts are visible). Point out the hyphen in the compound adjective *umbrella-like*.
-  **Check for understanding:** Have students find and circle the dashes used on page 12. Have them write how the dash is used in each instance on the page.
- **Independent practice:** Introduce, explain, and have students complete the [dash worksheet](#). If time allows, discuss their responses.

Word Work: **Synonyms**

- Write the word *useful* on the board. Ask students to suggest a word that means almost the same thing (*beneficial, handy, helpful*). Review or explain that a word that means the same or almost the same as another word is called a *synonym*.
- Ask students to explain why the use of synonyms is important in writing (they help to describe something in text, they make the writing more interesting and varied, and so on).
- Write the following sentence from the caption on page 9 on the board: *Use a microscope and look closely at the mold that grows on stale bread.* Circle the word *stale*. Ask students to use the context and picture clues in the sentence to suggest a word that means the same or almost the same as *stale* (*old, hard, and so on*). Write these words on the board.
- Ask students what the differences might be between stale bread and old bread. Ask them to explain how the word *stale* allows readers to get a more accurate description of the bread, rather than just using its synonym *old*. Point out that not all synonyms are the most appropriate word in a sentence, so writers need to think carefully about which word best expresses the thought.
- Show students a thesaurus. Model how to locate synonyms for the word *stale* in the thesaurus. Write the synonyms on the board. Tell students to look for the root or base word if they cannot find the word they're looking for in the thesaurus.
- **Check for understanding:** Give pairs of students a thesaurus. Ask them to locate synonyms for the word *better* and write them on a separate piece of paper. Then have them choose one of the synonyms and use it to write a sentence on the paper. If needed, provide additional practice using a thesaurus.
- **Independent practice:** Introduce, explain, and have students complete the [synonyms worksheet](#). If time allows, check their responses.

Build Fluency

Independent Reading

- Allow students to read their book independently. Additionally, partners can take turns reading parts of the book to each other.

Home Connection

- Give students their book to take home to read with parents, caregivers, siblings, or friends. Have students compare and contrast two objects in their home and write the information in a Venn diagram.

Extend the Reading

Expository Writing Connection

Have students use the Venn diagram they completed on their [compare-and-contrast worksheet](#) to write a paper about the two fungi they chose. Have them separate the information into three paragraphs—just as they are separated on the Venn diagram—writing one paragraph for each section. If time allows, invite them to illustrate their work and read their writing aloud in small groups.

Science Connection

Review the experiment on page 19: *Grow Your Own Fungus*. Supply the equipment and materials necessary to complete the project. Allow a week for observation, giving time each day for students to record what they see. Require a daily observation sheet in which students draw pictures and describe what they notice about the mold that grows.

Skill Review

[Discussion cards](#) covering comprehension skills and strategies not explicitly taught with the book are provided as an extension activity. The following is a list of some ways these cards can be used with students:

Lesson Plan *(continued)*

Fungus Among Us

- Use as discussion starters for literature circles.
- Have students choose one or more cards and write a response, either as an essay or as a journal entry.
- Distribute before reading the book and have students use one of the questions as a purpose for reading.
- Cut apart and use the cards as game cards with a board game.
- Conduct a class discussion as a review before the book quiz.

Assessment**Monitor students to determine if they can:**

- consistently ask relevant questions about a topic prior to and during reading; locate answers to their questions and write them on a worksheet
- compare and contrast nonfiction details within the text during discussion and on a worksheet
- correctly identify the use of dashes as punctuation; distinguish dashes from hyphens during discussion and on a worksheet
- identify and use synonyms during discussion and on a worksheet; understand how to use a thesaurus to locate synonyms for words

Comprehension Checks

- [Book Quiz](#)
- [Retelling Rubric](#)