

# 4

## Synthesize information from several texts in order to come to a new understanding

### Language Objectives

- Identify main ideas and key details.
- Make connections within a text and between multiple texts.
- Compare and contrast text structures.
- Synthesize information from several related texts.

### Building Literacy

Synthesizing information from several texts will help students move beyond what is stated by an author by:

- making text connections.
- developing a position on a topic.
- focusing on nuances of word choice.
- comparing and contrasting information from different sources.

### Focus on Language

Display the following multiple-meaning words that students will encounter in these texts. Have students use a three-column chart to list the words and identify two possible meanings for each. (Spanish cognates are in parentheses.)

- flocks
- scale (escala)
- bill
- chapter
- symbol (símbolo)
- report (reportar)



#### ENGLISH LANGUAGE LEARNERS

For English learners who struggle with pronunciation, make echo reading and repetition a regular part of the classroom routine. Increasing students' exposure to spoken vocabulary will reinforce correct pronunciation.



show me

In this lesson, students will read texts about birds and synthesize information to come to a new understanding about how humans have harmed and helped bird populations over time.

Say: Today, you are going to read related texts and synthesize information. When you synthesize, you put together details from two or more texts to form a deeper understanding of a topic. Each text will include different details and possibly express different points of view. You should determine which ideas are most important within each text and then figure out how these ideas connect and relate.

Have students turn and talk to a partner about a time they have synthesized information, such as to research and write a report. Encourage them to discuss the different types of texts they used and how they worked to combine information from the texts. Ask volunteers to share their experiences with the class.



guide me

Use the guide me text to help students practice identifying important details.

Have a volunteer read aloud the first paragraph and say something about the information it gives. Discuss with students which detail is the most important. Have them underline the first sentence.

Then, ask another volunteer to read aloud the second paragraph and say something about the events it describes.

Finally, have partners turn and talk about which detail in the paragraph is most important. ("In 1900, he wrote an article urging readers to look for and count birds on Christmas instead of hunting them.")

4

Synthesize information from several texts in order to come to a new understanding

show me

How can synthesizing information help me come to a new understanding?

guide me


example

Read the text below. Underline the detail you feel is most important in this biographical sketch of Frank Chapman.

from A New Look at Old Ways  
by Priyanka Das

Frank Chapman (1864-1945) was an American scientist who inspired people to care about birds. Chapman worked at the American Museum of Natural History in New York. He was also an officer of the Audubon Society. As the editor of a bird magazine, he shared his knowledge of birds with many people.

Chapman was upset about the killing of birds for sport, fashion, and tradition. One horrible tradition involved people competing with each other to shoot the most birds on Christmas day. In 1900, he wrote an article urging readers to look for and count birds on Christmas instead of hunting them. Today, the Christmas Bird Count is still popular. It also provides scientists with important information about birds.



COMPARING TEXTS 13

VISUAL LITERACY

Readers can strengthen their understanding of a text by making connections between its words and graphic features. Have small groups examine the picture on page 13 and imagine that it appeared alongside Frank Chapman’s 1900 article about counting birds on Christmas. Then, have them write a caption, based on details in the text, with that perspective in mind. Ask volunteers to share their captions with the class.



## work time

**Introduce Vocabulary** Write the following vocabulary words on the board: **flocks**, **scale**, **bill**. Point out the Spanish cognate for *scale*. Remind students of the multiple-meaning chart they created for the words. Then, have students identify the meaning of each word in the context of the text and draw a picture to show that meaning.

**Read—Pause—Summarize** Use the following interactive strategy to promote a strategic reading of the text.

Have student pairs take turns reading “The Plight of the Passenger Pigeon” aloud. After each student reads a paragraph, pause and have the partner summarize the information they just heard. Continue the process until the end of the text.

**Analyze Author’s Craft and Style: Word Choice** Remind students that authors choose their words carefully to strengthen their message and affect readers’ thoughts and feelings about the topic.

Review that in this text, the author begins by describing positive features of passenger pigeons and goes on to explain the negative results of people overhunting the birds.

Ask a volunteer to read aloud paragraph 2. Point out the words *impressive* and *important*. Discuss how the author uses these words to share positive views about passenger pigeons.

Then, have students work in pairs to review paragraphs 5 and 6 and identify negative words and phrases the author uses to describe the effects of people hunting the pigeons (*alarming rate*, “killed in a single day!” and “finally began to notice that the birds’ numbers were dropping”). Ask volunteers to share their examples.

**check for understanding** by having students complete the synthesis statement. (Possible response: I can synthesize information from this text and the text on page 13 to say that passenger pigeons were likely one type of bird people shot for sport on Christmas Day in the 1800s.)

## 4 Synthesize information from several texts in order to come to a new understanding

### work time

#### The Plight of the Passenger Pigeon

Kari Lauren Houlihan

- 1 In the 1800s, the passenger pigeon was one of the most common birds in North America. They numbered in the billions; people reported seeing flocks fly overhead that were so large, they darkened the sky. It could take hours for a single flock to pass by!
- 2 Passenger pigeons were not just an impressive sight. They were also an important source of food for small predators, such as owls, hawks, fox, and skunks. The young pigeons, called squabs, left the nest at about two weeks of age to fend for themselves and learn how to fly. During this time, squabs on the forest floor were easy pickings for hungry animals.
- 3 Passenger pigeons mainly ate acorns and beechnuts. They flew in huge flocks from forest to forest to feast on this food. As forests were cut down, however, the pigeons often fed in grain fields. Farmers shot pigeons to protect their grain crops.
- 4 Would you eat a pigeon? People also found passenger pigeons to be a tasty meal. At first, pigeons were hunted for the family table, but later they were hunted on a large scale. Huge numbers were shot and then packed for shipment to cities.
- 5 Over time, people began hunting passenger pigeons at an alarming rate. There were no laws or limits to stop them, so some people even shot the birds for sport. In 1878, at one of the largest nesting sites, 50,000 birds were killed in a single day! The adult birds that survived tried to nest again, but hunters found them, too.
- 6 In the 1890s, people finally began to notice that the birds’ numbers were dropping. In 1897, a bill was introduced in Michigan that banned the hunting of passenger pigeons for ten years; however, the small number of passenger pigeons left could not adjust to living in small flocks.
- 7 The last passenger pigeon died on September 1, 1914. It became one of several types of birds that went extinct in the United States in the last 150 years.

check for understanding I can synthesize information from this text and the text on page 13 to say that passenger pigeons \_\_\_\_\_.

14 COMPARING TEXTS

## CRITICAL LITERACY

One way to help students critically analyze a text is to have them put themselves in the positions of the people affected by the events and consider their own views on the topic.

Guide students to evaluate and discuss their viewpoints using questions such as:

- Do you think farmers should have shot pigeons to protect their crops? Why or why not? Could they have tried to scare them away instead?
- Why do you think people shot passenger pigeons for sport?
- Do you think people should change the way they interact with birds? If so, how?



## work time

**Introduce Vocabulary** Write the following vocabulary words on the board: **chapters**, **symbol**, **report**. Point out the Spanish cognates for *symbol* and *report*. Remind students of the multiple-meaning chart they created for the words. Then, have partners ask each other *yes/no* questions to identify which meaning of the word applies to the context of the text.

**Read—Pause—Make Connections** Use the following interactive strategy to promote a strategic reading of the text.

Have student pairs take turns reading “Good News for Feathered Friends” aloud. After each student reads two paragraphs, have him or her pause and share a personal connection.

On the board, write a few sentence frames to help guide the conversation, such as:

- This reminds me of \_\_\_\_\_.
- Other endangered animals I have read about are \_\_\_\_\_.
- I know that humans can also help wild birds by \_\_\_\_\_.

### Analyze Author’s Craft and Style: Problem and Solution

Review that authors use text structure to organize and connect ideas in a text. In a **problem-and-solution structure**, an author presents one or more problems and then describes a solution or solutions to the problem.

Ask a volunteer to read paragraph 3. Discuss the problem the author presents in the paragraph. (The chemical DDT spread through the food chain and affected bald eagles, causing their numbers to drop significantly.) Continue with paragraph 4. (The government’s ban of DDT combined with efforts to protect nesting areas helped to solve the problem of eagles’ endangerment.)

Have partners review paragraph 5 and identify the problem and solution the author describes. (There were very few California condors left. So, scientists raised them in captivity and released them in the wild.) Ask a volunteer to identify the text detail that shows the solution has been successful. (“Today, about 270 condors fly free again.”)

**check for understanding** by having students answer the question about how the text adds to their understanding. (Possible response: This text adds to my understanding of the Audubon Society’s work and helps me understand what it means that Frank Chapman was an officer of it.)

Synthesize information from several texts in order to come to a new understanding **4**

---

work time

**Good News for Feathered Friends**  
*by Joyce Davis*

- In the 1900s, numerous organizations were formed to help protect birds. One of these groups was the Audubon Society. Today, there are hundreds of Audubon chapters across the United States. Their aim is to educate people who want to learn more about the natural world. Representatives from these chapters visit nearly five thousand classrooms each year.
- Because of organizations such as the Audubon Society, many Americans are working to protect the welfare of birds everywhere.
- One bird that has been helped by people is the bald eagle. In the 1960s, scientists discovered that a poison called DDT, which was used to kill insects, collected in fishes’ bodies when the fish ate the poisoned insects. When female eagles ate these fish, they later laid eggs with thin shells that cracked. As a result, the number of bald eagles plummeted in the United States.
- In 1972, the U.S. government banned DDT. This ban, plus other efforts to protect areas where eagles nested, helped their numbers grow. The bald eagle has since been removed from the Endangered Species List. The recovery of this symbol of American freedom has been a great success story for conservationists.
- Another bird that has benefited from human help is the California condor. In the 1980s, only 22 condors remained. So scientists started raising them in captivity and releasing young pairs in the wild. Today, about 270 condors fly free again.
- Finding and counting birds is part of these scientists’ jobs, but many people do this for fun. How many birds have you seen in just the past week? Keep track for a few days and report your observations to a birding organization. Then give yourself a pat on the back. You are now a citizen scientist!

check for understanding How does this text contribute to your understanding of the text on page 137?

COMPARING TEXTS 15

## VISUAL LITERACY

Graphic organizers can help students make sense of concepts in related texts and visualize connections between them. Have students use details from all three texts to complete a semantic map about endangered birds. Ask volunteers to share their maps, and record their ideas in a class map on the board.

## ➞ check for understanding

**Analyze Author’s Craft and Style** Have students work with a partner to answer the **check for understanding** questions.

If students struggle to identify connections between texts, use a Think Aloud to model how a critical thinker would approach the texts.

**Think Aloud** I will think about the most important ideas in “A New Look at Old Ways” and then look for connections to the other texts. The text tells about the damaging tradition of people killing birds for sport on Christmas. This reminds me of the information about how people overhunted passenger pigeons in “The Plight of the Passenger Pigeon.” The text also describes how John Chapman, an officer of the Audubon Society, wrote an article about protecting birds. This is like the information in “Good News for Feathered Friends” that tells about how the Audubon Society and other scientists have worked to protect birds and save them from extinction.

**Synthesize Information** To help students synthesize information to complete the new idea sentence, have them read each detail in the chart carefully. Guide them to circle key words in each detail that relate to the words in the New Idea sentence frame. Then, prompt students to use common elements within the three details to correctly fill in the blanks.

## ➞ reflect

Have partners discuss other understandings they developed by synthesizing information from the three texts. Ask volunteers to share their thoughts with the class, using the following sentence frames:

- The authors of \_\_\_\_\_ and \_\_\_\_\_ describe \_\_\_\_\_. This shows me that \_\_\_\_\_.
- “The Plight of the Passenger Pigeon” includes the detail \_\_\_\_\_. “Good News for Feathered Friends” includes the detail \_\_\_\_\_. When I put together this information, I understand that \_\_\_\_\_.

4
Synthesize information from several texts in order to come to a new understanding

➞ check for understanding
1 What information would you have liked the author to include in “Good News for Feathered Friends”? Why?
Possible response: I’d like more information about what the Audubon society does and it and how it helped the bald eagle and condor.
2 What is the biggest difference between “The Plight of the Passenger Pigeon” and “Good News for Feathered Friends”?
Possible response: The first tells how humans drove a bird to extinction, and the second tells how human efforts save two birds from extinction.
3 In what way does “A New Look at Old Ways” on page 13 connect to the other texts?
It tells how birds were often needlessly shot, as with the passenger pigeon, and how Chapman worked to protect birds, as with the Audubon Society.
4 How do the structures of “Good News for Feathered Friends” and “The Plight of the Passenger Pigeon” differ?
The first uses problem-solution to explain saving the bald eagle and condor. The second uses sequential and cause-effect to tell about passenger pigeons.
5 Synthesize the details from each text to write a new idea.
Detail: Frank Chapman inspired people to care about birds.
Detail: Several birds have gone extinct in the last 150 years.
Detail: The Audubon Society and scientists work to protect birds.
New Idea: Scientists, groups, and individuals work to protect birds and prevent species from becoming extinct.
➞ reflect
Work with a partner. Share another idea you came to understand by synthesizing information from the texts.

16
COMPARING TEXTS

## CRITICAL LITERACY

To encourage further inquiry and social action, have students conduct research about a current problem that is affecting birds. For example, students may study how air or light pollution affects birds or how human populations affect bird migrations. Then, have groups plan and write a short article persuading people to take action to address the problem and help protect the affected birds.

## Synthesize information from several texts in order to come to a new understanding

➤ show me

How can synthesizing information help me come to a new understanding?

➤ guide me

example

Read the text below. Underline the detail you feel is most important in this biographical sketch of Frank Chapman.

### **from A New Look at Old Ways**

*by Priyanka Das*

Frank Chapman (1864-1945) was an American scientist who inspired people to care about birds. Chapman worked at the American Museum of Natural History in New York. He was also an officer of the Audubon Society. As the editor of a bird magazine, he shared his knowledge of birds with many people.

Chapman was upset about the killing of birds for sport, fashion, and tradition. One horrible tradition involved people competing with each other to shoot the most birds on Christmas day. In 1900, he wrote an article urging readers to look for and count birds on Christmas instead of hunting them. Today, the Christmas Bird Count is still popular. It also provides scientists with important information about birds.





## work time

### The Plight of the Passenger Pigeon

*Kari Lauren Houlihan*

- 1 In the 1800s, the passenger pigeon was one of the most common birds in North America. They numbered in the billions; people reported seeing flocks fly overhead that were so large, they darkened the sky. It could take hours for a single flock to pass by!
- 2 Passenger pigeons were not just an impressive sight. They were also an important source of food for small predators, such as owls, hawks, fox, and skunks. The young pigeons, called squabs, left the nest at about two weeks of age to fend for themselves and learn how to fly. During this time, squabs on the forest floor were easy pickings for hungry animals.
- 3 Passenger pigeons mainly ate acorns and beechnuts. They flew in huge flocks from forest to forest to feast on this food. As forests were cut down, however, the pigeons often fed in grain fields. Farmers shot pigeons to protect their grain crops.
- 4 Would you eat a pigeon? People also found passenger pigeons to be a tasty meal. At first, pigeons were hunted for the family table, but later they were hunted on a large scale. Huge numbers were shot and then packed for shipment to cities.
- 5 Over time, people began hunting passenger pigeons at an alarming rate. There were no laws or limits to stop them, so some people even shot the birds for sport. In 1878, at one of the largest nesting sites, 50,000 birds were killed in a single day! The adult birds that survived tried to nest again, but hunters found them, too.
- 6 In the 1890s, people finally began to notice that the birds' numbers were dropping. In 1897, a bill was introduced in Michigan that banned the hunting of passenger pigeons for ten years; however, the small number of passenger pigeons left could not adjust to living in small flocks.
- 7 The last passenger pigeon died on September 1, 1914. It became one of several types of birds that went extinct in the United States in the last 150 years.

**check for understanding** I can synthesize information from this text and the text on page 13 to say that passenger pigeons \_\_\_\_\_.

➤ **work time**

**Good News for Feathered Friends**

*by Joyce Davis*

- 1 In the 1900s, numerous organizations were formed to help protect birds. One of these groups was the Audubon Society. Today, there are hundreds of Audubon chapters across the United States. Their aim is to educate people who want to learn more about the natural world. Representatives from these chapters visit nearly five thousand classrooms each year.
- 2 Because of organizations such as the Audubon Society, many Americans are working to protect the welfare of birds everywhere.
- 3 One bird that has been helped by people is the bald eagle. In the 1960s, scientists discovered that a poison called DDT, which was used to kill insects, collected in fishes' bodies when the fish ate the poisoned insects. When female eagles ate these fish, they later laid eggs with thin shells that cracked. As a result, the number of bald eagles plummeted in the United States.
- 4 In 1972, the U.S. government banned DDT. This ban, plus other efforts to protect areas where eagles nested, helped their numbers grow. The bald eagle has since been removed from the Endangered Species List. The recovery of this symbol of American freedom has been a great success story for conservationists.
- 5 Another bird that has benefited from human help is the California condor. In the 1980s, only 22 condors remained. So scientists started raising them in captivity and releasing young pairs in the wild. Today, about 270 condors fly free again.
- 6 Finding and counting birds is part of these scientists' jobs, but many people do this for fun. How many birds have you seen in just the past week? Keep track for a few days and report your observations to a birding organization. Then give yourself a pat on the back. You are now a citizen scientist!

➤ **check for understanding** How does this text contribute to your understanding of the text on page 13?



## ➤ check for understanding

- 1 What information would you have liked the author to include in “Good News for Feathered Friends”? Why?
- 2 What is the biggest difference between “The Plight of the Passenger Pigeon” and “Good News for Feathered Friends”?
- 3 In what way does “A New Look at Old Ways” on page 13 connect to the other texts?
- 4 How do the structures of “Good News for Feathered Friends” and “The Plight of the Passenger Pigeon” differ?
- 5 Synthesize the details from each text to write a new idea.

<b>Detail:</b> Frank Chapman inspired people to care about birds.	<b>Detail:</b> Several birds have gone extinct in the last 150 years.	<b>Detail:</b> The Audubon Society and scientists work to protect birds.
<b>New Idea:</b> Scientists, groups, and individuals work to _____ and prevent species from _____.		

## ➤ reflect

Work with a partner. Share another idea you came to understand by synthesizing information from the texts.