

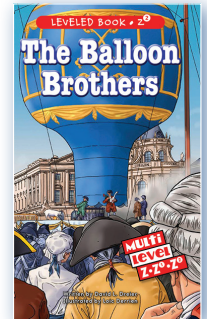
Focus Question:

Who were the Montgolfier brothers, and why are they remembered?

Book Summary

Text Type: Nonfiction/Informational

In Europe, during the late 1700s, frenzy and fascination swirled around the possibility of traveling by air. The Montgolfier brothers were at the forefront of this movement, creating the first-ever hot-air balloon. *The Balloon Brothers* details the science and the history of these ingenious brothers along with other inventors and brave souls who made air travel a reality. The book and lesson are also available for levels Z and Z1.



Lesson Essentials

Instructional Focus

- ☐ Ask and answer questions to understand text
- ☐ Determine cause and effect
- ☐ Describe information provided by graphics
- ☐ Recognize and use possessive nouns
- ☐ Identify and use content vocabulary

Materials

- ☐ Book: *The Balloon Brothers* (copy for each student)
- ☐ Cause and effect, possessive nouns, content vocabulary worksheets
- ☐ Discussion cards
- ☐ Book quiz
- ☐ Retelling rubric

Vocabulary

Boldface vocabulary words also appear in a pre-made lesson for this title on VocabularyA-Z.com.

• Words to Know

Story critical: *airships* (n.), *buoyancy* (n.), *envelope* (n.), *experiment* (n.), *immersed* (v.), *intrigued* (adj.)

Enrichment: *chemists* (n.), *combustible* (adj.), *inflammable* (adj.), *molecules* (n.), *physicist* (n.), *prestige* (n.)

- **Academic vocabulary:** *conclude* (v.), *design* (n.), *effect* (n.), *event* (n.), *observe* (v.), *produce* (v.)

Guiding the Reading

Before Reading

Build Background

Write the word *inventor* on the board and read it aloud to students. Have students work in small groups to discuss the meaning of the word *inventor*. Point out that an inventor is a person who creates something new or something that has never existed before. Ask volunteers to offer the names of any famous inventors with which they are familiar. Have students work in small groups to discuss the qualities indicative of an effective inventor, such as curiosity, perseverance, organization, and so on. Provide each group with a piece of chart paper to record this information. Invite each group to share its work with the class.

Introduce the Book

- Give students their copy of *The Balloon Brothers*. 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 (genre, text type, and so on) and what it might be about.
- Show students the title page. Discuss the information on the page (title of book, author's name, illustrator's name).
- Preview the table of contents on page 3. Remind students that the table of contents provides an overview of the book. Ask students what they expect to read about in the book, on the basis of what they see in the table of contents. (Accept all answers that students can justify.)

Introduce the Reading Strategy:

KWLS / ask and answer questions

Explain to students that engaged readers ask and answer questions while they are reading and that one way to organize this information is to use a KWLS chart. Draw a KWLS chart on the board. Have students look at the cover of the book and share with the class what they know about the history of hot-air balloons. Record this information on the K section of the chart. Invite students to preview the illustrations and graphics in the book with a partner.

Guiding the Reading (cont.)

to create questions about hot-air balloons. Have volunteers share questions with the class and record this information in the *W* section of the KWLS chart on the board. Point out that, as they read, students should look for the answers to these questions as well as create new questions to add to the chart.

Introduce the Comprehension Skill:

Cause and effect

- Discuss cause-and-effect relationships. Explain that a *cause* is an action or event that makes something happen and the *effect* is what happens because of, or as a result of, the action or event.
- Explain to students that there can be more than one effect from a cause. Create a cause-and-effect chart on the board, and write *running late for school* in the *Cause* column and *missed the spelling test* in the *Effect* column. Ask students what else can happen when someone is running late for school. Record students' responses on the board.
- Explain to students that they will be looking for cause-and-effect relationships as they read the book.

Vocabulary

Have students turn to the "Words to Know" box on the copyright page. Discuss each word with students. Then, have students turn to the glossary on page 16. Explain that the glossary provides definitions for the vocabulary words in the book. Point out the use of each content word and academic vocabulary word in the book, and then use each word in a different model sentence. Have students work in groups to create posters for these words. Have them include on each poster the word and its part of speech, the definition, the word in an example sentence, and a picture illustrating the meaning of the word.

Set the Purpose

- Have students read to find out more about the Montgolfier brothers. Write the Focus Question on the board. Invite students to look for evidence in the book to support their answer to the question.
- Have students make a small question mark in their book beside any word they do not understand or cannot pronounce. These can be addressed in a future discussion.

During Reading

Text-Dependent Questions

As students read the book, monitor their understanding with the following questions. Encourage students to support their answers by citing evidence from the book.

- *How was history changed on September 19, 1783?* (level 2) pages 4 and 5

- *Who were the Montgolfier brothers, and why were they interested in creating a lighter-than-air craft?* (level 1) page 6
- *What successes and failures did the Montgolfier brothers face before they were able to create a working hot-air balloon?* (level 3) multiple pages
- *Who was Jacques Charles, and how was he different from the Montgolfier brothers? How was he similar?* (level 2) pages 10–14
- *Why did the Montgolfier brothers and Charles want to gain the king's favor?* (level 3) multiple pages
- *Why were the first two men to fly in a balloon considered heroes?* (level 1) page 14
- *How did the evolution of aircraft continue after the legacy of the Montgolfier brothers?* (level 1) page 15

Text Features: Graphics

Explain that graphics are features of a text that give additional information about the subject matter. Point out that graphics are often found in nonfiction books and help the reader to gain a greater knowledge or more background information about what he or she is reading. Have students turn to page 11 and identify the graphic at the bottom of the page. Invite a volunteer to read it aloud. Ask students: *Why did the author include this graphic about hydrogen and helium? How does the information in this graphic connect the information the author included about the Montgolfier brothers?* Have students work with a partner to review other graphics in the book and discuss as a class why the author chose to include each one.

Skill Review

- Have students refer back to the KWLS chart on the board. Ask students to review the questions recorded prior to reading the book. Ask them which questions were answered and discuss as a class this information. Then record it in the *L* section of the chart. Ask students to share any new questions they have with the class and record these in the *W* section of the chart. Point out that effective readers continue to create new questions as they are reading in order to stay engaged with the text.
- Have students work in groups to periodically review the cause-and-effect relationships they find in the book. Have groups discuss their opinions of these relationships.
- Model evaluating details to determine cause-and-effect relationships.
Think-aloud: This book is providing me with information about the cause-and-effect relationships throughout the Montgolfier brothers' journey of creating one of the first hot-air balloons. For example, I read on page 11 that the brothers became the king's favorites. Because they were his favorites, the brothers were invited to Paris to build

Guiding the Reading (cont.)

a balloon for the king and the government funded their work. This is one of many cause-and-effect relationships I read about in the book.

- Model how to complete the **cause-and-effect worksheet**. Have students identify details from the book and circle them. Then, have students discuss the details with a partner and determine the cause-and-effect relationships in the book.

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.

Skill Review

Graphic Organizer: **Cause and effect**

Review the cause-and-effect worksheet that students completed. Have students share their work in groups. Discuss with students how the cause-and-effect relationships influenced the work of the Montgolfier brothers.

Comprehension Extension

Discussion cards covering comprehension skills and strategies not explicitly taught with the book are provided to for extension activities.

Response to Focus Question

Have students cite specific evidence from the book to answer the Focus Question. (Answers should include the following: *The Montgolfier brothers were two French inventors who worked together to create one of the first hot-air balloons. They are remembered because they were some of the first pioneers in creating lighter-than-air craft.*)

Comprehension Checks

- **Book quiz**
- **Retelling rubric**

Book Extension Activities

Build Skills

Grammar and Mechanics: **Possessive nouns**

- Write the following sentence on the board and read it aloud: *As the king's favorites, the brothers now received government funding for their work.* Underline the word *king's* and circle the 's. Point out that the word *king* is a noun and that the 's indicates that the favorites (the Montgolfier brothers) belonged to the king. Explain that the word *king's* is a *possessive noun*, or a word that shows possession or ownership.
- Write the following sentence on the board: *The government funded the Montgolfier*

brothers' experiments. Underline the word *brothers'* and have students identify the object of this possessive noun (*experiments*). Have students turn to a partner and discuss why the apostrophe after the word *brothers'* comes after the Ss. Point out that when a possessive noun is plural, or refers to more than one person, place, or thing, the apostrophe is placed after the Ss. Invite students to think of other examples of plural possessive nouns and record them on the board.

- Remind students to be careful when discerning possessive nouns and contractions. Write the following words on the board: *it's, balloon's, that's, village's*. Have students turn to a partner to discuss and determine which words are possessive nouns and which words are contractions. Review students' findings as a class.
- **Check for understanding:** Have students work independently to write two complete sentences that each contain a possessive noun and a contraction. Have students exchange papers with a partner to circle the possessive nouns and identify their objects. Then have students identify and underline the contractions.
- **Independent practice:** Introduce, explain, and have students complete the **possessive nouns worksheet**. If time allows, discuss their answers.

Word Work: **Content vocabulary**

- Explain to students that many of the words in *The Balloon Brothers* explain history of the Montgolfier brothers and the process of their experimentation. Point out that many of these vocabulary words also explain the science behind early air travel.
- Have students turn to page 10 and locate the word *physicist*. Point out that the word is in boldface print because the author feels that it is important for the reader to understand the meaning of the word *physicist*. Have students turn to a partner and locate the part of the text that helps define the word *physicist*. Point out that oftentimes the author will either provide a direct definition of a boldfaced word or will give clues as to its meaning.
- **Check for understanding:** Write the following words on the board: *atoms, prestige, physicist, element*. Invite students to work in small groups and provide each group a piece of chart paper. Have them fold the chart paper into four sections and label each section with one of the content vocabulary words on the board. Have students draw or write a definition for each word and then share their findings with the class.
- **Independent practice:** Introduce, explain, and have students complete the **content vocabulary worksheet**. If time allows, discuss their answers.

Connections

- See the back of the book for cross-curricular extension ideas.