



### About the Book

Text Type: Nonfiction/Informational Page Count: 20 Word Count: 855

### Book Summary

*Fantastic Flying Machines* is an informational book about the history behind human flight. Photographs and illustrations support the text.

Book and lesson also available at Levels I and L.

### About the Lesson

#### Targeted Reading Strategy

- Visualize


#### Objectives

- Use the reading strategy of visualizing to understand text
- Identify main idea and supporting details
- Understand the use of y as a vowel
- Recognize proper nouns
- Identify and create compound words

#### Materials

Green text indicates resources available on the website

- Book—*Fantastic Flying Machines* (copy for each student)
- Chalkboard or dry erase board
- Visualize, main idea and details, proper nouns, compound words worksheets
- Discussion cards

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

#### Vocabulary

- Content words:  
 Story critical: *blimp (n.), cargo (n.), hang glider (n.), hot-air balloon (n.), jet engine (n.), propeller (n.)*  
 Enrichment: *helicopter (n.), helium (n.), military (n.), parachutes (n.), space shuttle (n.), speed of sound (n.)*

### Before Reading

#### Build Background

- Ask students if they have ever been on an airplane. Invite them to share their experiences. Discuss the other types of things that people use to fly in the sky.
- Show pictures of different kinds of airplanes, helicopters, jets, spaceships, rockets, hang gliders, and hot-air balloons. Invite students to share what they see, and ask for their opinions.
- Ask students to think about the first flying machines and what they think these machines were like. Ask them to think about the inventors and how they must have come up with their ideas.

### 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 kind of book it is and what it might be about.
- Ask students if they think this book is fiction or nonfiction and to explain their reasoning.
- Show students the title page. Talk about the information on the page (title, authors' names).
- Preview the table of contents on page 3. Ask students what information they can tell from looking at the section titles. (Accept all answers that students can justify.)

#### Introduce the Reading Strategy: **Visualize**

- Explain to students that good readers often visualize, or create pictures in their mind, while reading. Visualizing is based on what a person already knows about a topic. Explain that one way to visualize is to draw a picture. Read page 4 aloud.
- Model how to visualize.  
*Think-aloud: Whenever I read a book, I always pause after a few pages to create a picture in my mind of the information I've read. This helps me organize the important information and understand the ideas in the book. For example, on page 4, the author tells us to imagine flying across the sky. I imagined being able to see Earth from far above, with the wind flying in my hair and the sun warming my back. I imagined I could see people and trees from far up and that they looked tiny because I was so high in the sky.*
- Explain that one way to visualize is to draw a picture. Introduce and explain the **visualize worksheet**. Have students draw on their worksheet what they visualized while listening to you read page 4. Invite students to share their drawings.
- As students read, encourage them to use other reading strategies in addition to the targeted strategy presented in this section.

#### Introduce the Comprehension Skill: **Main idea and details**

- Explain that every book has a big idea that is the most important idea of the book. Review or explain that the main idea is often the title of the book. Have students take another look at the book covers. Ask them to predict the main idea of the book.
- Explain that each page in the book contains supporting details that tell the readers more about the book's main topic (machines that fly).
- Model using the table of contents to infer supporting details in the text.  
*Think-aloud: When I look at the table of contents, I see that the word airplanes is listed. I already know that airplanes are machines that fly in the sky, so this is probably a supporting detail in the book. As I read, I know that I will find out even more details about machines that fly. As I read, I will pause after a few pages to review in my mind the important details. This strategy will help me make sure I understand what I'm reading. I know that good readers do this when they read, so I am going to look for supporting details as I read this book.*
- Have students turn to the table of contents and list some other supporting details about machines that fly (helicopters, balloons, rockets, and so on).

#### Introduce the Vocabulary

- Write content vocabulary words from the book on the board: *blimp, airplane, hang glider, helicopter, hot-air balloon, jet engine, rockets, and space shuttle*. Practice saying the words aloud with students. Refer back to the pictures provided during the Build Background section. Have students explain what they know about these flying machines.
- Create a two-column chart on the board with the headings *Motorized* and *Nonmotorized*. Discuss what the headings mean, and give examples from everyday life (cars and buses are motorized, because they have motors; bicycles are nonmotorized). Explain that nonmotorized things rely on other sources of power (bicycles use the power supplied when the rider pumps his or her legs).



- Invite volunteers to predict which of the vocabulary words belong in the *Motorized* category and which belong in the *Nonmotorized* category. When the discussion is complete, write each vocabulary word under the appropriate category on the board.

### Set the Purpose

- Have students read to find out more about the fantastic flying machines in the book. Remind them to stop after every few pages to visualize the most important information and to draw on their worksheet what they visualized about it.

## During Reading

### Student Reading

- **Guide the reading:** Have students read from page 5 to the end of page 11. Encourage those who finish early to go back and reread. Have students draw what they visualized.
  - Model visualizing.  
*Think-aloud:* When I read about the early inventions people tried as they attempted to fly, I pictured people strapping wings to their arms and flapping around like birds. I thought about how much work it would take to actually get off the ground, and I visualized the people getting very tired without having much success. Have students share the pictures of what they visualized while reading. Have them explain their drawings aloud.
  - Model identifying the main idea and details for a section of the book.  
*Think-aloud:* As I started reading the section titled “History of Flight,” most of the sentences mentioned something about people trying to find a way to fly. I read that two French brothers made the first hot-air balloon, and that someone else made a glider that could sail in the air for a long time. I will underline this information. I also read that the Wright brothers studied these ideas and used their knowledge to build the first airplane. It flew for 260 meters and for one full minute. I will underline this information, too. Based on what I’ve read, I think the main idea of the section is: Many people tried to find different ways to fly. The Wright brothers studied the past success of others’ inventions to create the first flying airplane.
  - Write the main idea on the board. Ask students to identify details that support this main idea (two French brothers, first glider that worked, 260 meters, and so on). Write these details on the board.
  - **Check for understanding:** Have students read to the end of page 14. Have them visualize the information on those pages. Discuss what they visualized. Ask students to use their worksheet to add to their drawings on their worksheet as they visualize the information in the book. Point out that they can use their drawings to identify the important details they just read.
-  Have students reread the section titled “Airplanes,” underlining the important information. Invite them to work with a partner to identify the main idea of the section. Have them write the main idea in the margin of their book or on a separate piece of paper. Check individual responses for understanding.
-  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

- Ask students to explain or show how the strategy of visualizing helped them understand and remember important events in the book.

**Think-aloud:** *When I read about blimps being used to film large sporting events, I pictured the long balloon floating over the crowds of people. I pictured excited fans looking up to see the cameras on the blimps, waving madly to try to make it on television. This helped me to understand what blimps are used for and to remember that part of the book.*

- Independent practice:** Have students complete the visualize worksheet. If time allows, have them share their pictures when finished.


### Reflect on the Comprehension Skill


- Discussion:** Talk about how stopping to review the important details helped students remember the facts and better understand the information they read. Ask them to use the important details they identified to confirm or refine the main idea of the book.
- Have students reread page 14 and look for supporting details about the main idea. Write the details about helicopters on the board (travel faster than cars, an ambulance, police chase criminals, rescue people who are lost). Ask students how this information supports the main idea (the facts are all important to understanding why flying machines are fantastic).
- Independent practice:** Introduce, explain, and have students complete the [main-ideas-and-details worksheet](#). When everyone has finished working independently, review their answers aloud.
- Enduring understanding:** In this book, you learned about many different machines that fly. You learned about how different inventions evolved from the ideas of other people. Now that you know this information, how does it make you feel about the importance of scientific experimentation and discovery? Why is it important to know that inventions evolve, and what does this make you think about flying machines of the future?

## Build Skills

### Phonics: Y as a vowel

- Review with students the letters that are vowels (a, e, i, o, u, and sometimes y) and the letters that are consonants (all of the other letters in the alphabet that are not vowels). Point out that y is the only letter in the alphabet that can be either a consonant or a vowel, depending on its use within a word. Discuss that all words need at least one vowel sound.
- Write the following words on the board: *my, sky, fly, by, and why*. Read them out loud, and ask students to listen for the sound that they all share (the long /i/ sound). Ask students what vowel each word uses to make the long /i/ sound (y).
- Have students turn to page 5. Read the first sentence aloud as students follow along. Point out the word *fly*. Explain that the y makes the long /i/ sound, and there are no other vowels in the word, therefore the y is a vowel in this word.
- Explain that when y is used as a vowel, it also can make the long /e/ sound. Write the following words on the board: *happy, baby, and funny*. Read them aloud, and ask students to listen for the long /e/ sound. Point out that all of them use the letter y to make the long /e/ sound.
- Have students turn to page 8. Read the third sentence aloud as students follow along. Point out the word *carry*. Explain that the y makes the long /e/ sound, and therefore is a vowel in this word.


 **Check for understanding:** Have students work in pairs to locate all of the words on page 11 that use the letter y as a vowel. In the margins of their books, have them identify the sound (long /i/ or long /e/) that each y makes (*military* has the long /e/ sound; *fly* has the long /i/ sound). Invite them to share their sentences aloud.

 **Independent practice:** Have students continue through the book, working individually to identify all of the words that use the letter y as a vowel, and whether each makes the (long /i/ or long /e/) sound. Discuss their answers.

### Grammar and Mechanics: Proper nouns

- Review or explain that a *noun* is a *person, place, or thing*. Ask students to turn to page 7 and give examples of nouns from the text (*brothers, airplane, minute, and so on*).
- Review or explain that a *proper noun* is the name of a specific person, place, or thing. A proper noun always begins with a capital letter. Write examples of proper nouns from page 7 on the board (*Orville, Wilbur, Wright, December*).
- Remind students not to confuse the capital letter in a proper noun with the capital letter used at the beginning of a sentence, or in title of a chapter. Point out instances in the book where capitals are used but a proper noun is not present.
- **Check for understanding:** Write the following nouns in a column on the board: *girl, boy, street, month, holiday*. Ask volunteers to give examples of proper nouns for each word, and write them on the board (*month: June, February, and so on*).
- **Independent practice:** Introduce, explain, and have students complete the [proper nouns worksheet](#). When students finish, discuss their answers aloud.

### Word Work: Compound words

- Write the word *airplane* on the board. Ask students which two words were joined together in the word *airplane* (*air* and *plane*). Explain that *airplane* is a *compound word*. A compound word contains two words that together create one word meaning. Explain that the definitions of the two separate words can help students figure out the meaning of the compound word (a *plane* that floats in the *air*).
- Write the following sentence on the board: *A helicopter can land almost anywhere*. Have students read the sentence and identify the compound word (*anywhere*). Ask them which two words are joined together to make the word *anywhere* (*any* and *where*). Ask a volunteer to share how the definitions of the two separate words can be used to figure out the meaning of the compound word.
-  **Check for understanding:** Have students read page 17 in their book. Have them identify and underline the compound words on the page (*spaceships, everyone's*). Ask students to circle the two words contained in each compound word. Have them use these words to discuss the meaning of each larger word with a partner. Then discuss the meaning of the word with students as a group.
- **Independent practice:** Introduce, explain, and have students complete the [compound words worksheet](#). When students finish, discuss their answers aloud.

## 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 practice visualizing the types of flying machines with someone at home and then compare the pictures they created in their minds.

## Extend the Reading

### Informational Writing Connection

Provide print and Internet sources for students to find out more about Orville and Wilbur Wright. Have students cite information from their research and the book and write a report. Instruct students to write at least three sections, including an introduction and conclusion. Encourage them to add illustrations or photographs to their report. Require an error-free final copy and make a front and back cover. Either bind each report separately, or bind all of the reports together to make a class book with its own front and back cover.

Visit [Writing A-Z](#) for a lesson and leveled materials on expository report writing.

### Social Studies Connection

Provide print and Internet sources for students to research the history of human flight. Have them create a timeline of flight-related events, showing the development of flight over time. Have them include all of the events listed in *Fantastic Flying Machines*, as well as any new information they may have found during their research. Post the completed timelines in the classroom.

### 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:

- 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 use the strategy of visualizing to comprehend the text during discussion and on a worksheet
- identify the main idea and supporting details to better understand the text through discussion and on a worksheet
- demonstrate understanding of the use of y as a vowel
- identify proper nouns during discussion and on a worksheet
- correctly identify and form compound words during discussion and on a worksheet

### Comprehension Checks

- **Book Quiz**
- **Retelling Rubric**