



About the Book

Text Type: Nonfiction/Informational Page Count: 16 Word Count: 407

Book Summary

Three . . . two . . . one . . . liftoff! Building model rockets has been a hobby since the 1950s. *Model Rockets* provides details about the parts of a model rocket and how to launch one in the air. The photographs and diagrams illustrate this enjoyable hobby and the competitions that go along with it.

About the Lesson

Targeted Reading Strategy

- Ask and answer questions

Objectives

- Use the strategy of asking and answering questions to understand text
- Identify main idea and details
- Identify consonant *sh* digraphs
- Identify and use exclamation marks
- Recognize and understand syllable patterns

Materials

Green text indicates resources that are available on the website.

- Book—*Model Rockets* (copy for each student)
- Chalkboard or dry-erase board
- Dictionaries
- KWLS / ask and answer questions, main idea and details, exclamation marks, syllable patterns worksheets
- Sheets of paper
- Discussion cards



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

Vocabulary

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

- Content words:
 Story critical: **competitions** (n.), **designs** (n.), **engine** (n.), **hobby** (n.), **model** (n.), **parachute** (n.)
 Enrichment: **controller** (n.), **fuel** (n.), **launchpad** (n.)

Before Reading

Build Background

- Ask students to raise their hand if they have ever seen a real rocket. Then, ask if they have ever seen a model rocket. Invite students to share their experiences.

- Create a large KWLS chart on the board or chart paper and hand out the **KWLS / ask-and-answer-questions worksheet**. Review or explain that the letter *K* stands for knowledge that we already know, the *W* stands for information we want to learn, the *L* stands for knowledge we learned, and the *S* stands for anything we still want to know on the topic. Have students share what they know about model rockets, and record all the information in the first row of the chart while students complete it on their worksheet.

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 (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).

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

- Explain to students that having prior knowledge about a topic, and asking questions before and during reading, will help readers understand and remember the information they read.
- Model how to ask and answer questions using the front and back covers and the title.
Think-aloud: I can use the front and back covers and title of the book to help me think of questions I would like answered about model rockets. For example, I see a model rocket blasting off into the sky on the front cover. I wonder how you make the rocket blast off. I'll have to read the book to find out. I'll write this question in the second row of the KWLS chart.
- Have students look at the table of contents on page 4, as well as the pictures and diagrams throughout the book. Also show students the glossary and explain that looking at the words and their definitions can help them formulate more questions about the topic. Ask them to come up with questions they have about model rockets and have them write them in the *W* row of their KWLS / ask-and-answer-questions worksheet. When students are finished, invite volunteers to share their questions with the class. Add the questions to 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: **Main idea and details**

- Explain to students that when a topic has a lot of information, it is too large to have one main idea, so it is broken up into sections, and each section has its own main idea.
- Read the section titles on the table of contents page aloud to students. Explain that you will be showing them how to identify all of the main ideas in the book, which will help them understand and remember the content of the book.
- Read page 4 aloud to students. Model identifying the main idea and details.
Think-aloud: I know that sometimes the heading of a section mentions the main idea. Each section contains details that support the main idea about model rockets. The first section contains information about the liftoff of a model rocket. I learned that a model rocket shoots into the sky and can fly up to 1,500 feet high. I will underline this information. On the basis of what I've read, I think the main idea of this section is model rockets can be exciting and educational.
- Write the main idea on the board and ask students to identify the details from the book that support this main idea (shoots in the sky, up to 1,500 feet high, watching them is fun and exciting, they teach us about science and space). Write these details on the board.

Introduce the Vocabulary

- Write the following words from the content vocabulary on the board: *competitions*, *design*, and *parachute*.

- Point out that these words can be found in the text and that knowing their definitions will help students understand what they are reading. Give groups of students three pieces of paper. Explain that they are going to discuss what they know about each word and then record their information with words or drawings. Together, create a definition for each word using the students' prior knowledge.
- Point out the glossary at the back of the book. Review that a glossary and a dictionary contain words and their definitions.
- Model how students can use a dictionary to find a word's meaning. Have them locate the word *competitions* in the dictionary. Ask a volunteer to read the definition for *competitions*. Have students compare the dictionary definition with the definition they came up with.
- Have students follow along on page 13 as you read the sentence in which *competitions* is located to confirm the meaning of the word. Repeat this process with the rest of the vocabulary words.

Set the Purpose

- Have students think about what they already know about model rockets as they read to find out the answers to their questions and record what they learned in the *L* row of their KWLS / ask-and-answer-questions worksheet. Remind them to think about the main idea and details of each section as they read.

During Reading

Student Reading

- **Guide the reading:** Give students their copy of the book. Have them read from page 4 to the end of page 9. Remind them to look for answers to their questions on their KWLS / ask-and-answer-questions worksheet. Encourage students who finish before others to reread the text.
- When students are finished reading, have them discuss what they learned in each section and share the information they gathered about the parts of a model rocket. Have students look at their worksheet and circle any questions that were answered and add any new questions that came about as they read.
- Model answering a question and filling in the third row of the KWLS chart.
Think-aloud: I wanted to know how a model rocket takes off. I found out that there is an engine in the rocket that burns fuel to push the rocket into the air. I will record this information on my chart. I wonder what the rocket is placed on and how it helps the rocket take off. I will add this question to my chart.
- Have students record the answers to the circled questions in the *L* section of their KWLS / ask-and-answer-questions worksheet. Then, have them write any new questions that came up in the *W* section of the worksheet. Invite students to share what they learned and their new questions. Record responses on the class KWLS chart.
- Review with students that the title of each section is usually a clue about the main idea for that part of the book. Have students turn to page 6 and say: *The title of this section is called "Parts of a Model Rocket." The section describes all of the parts needed to make a model rocket. This will be the main idea for this section.*
- Write the main idea on the board: *parts of a model rocket*. Ask students to identify the details that support the main idea (long tube of cardboard or plastic, nose cone, fins, engine, parachute, and so on). Record the details on the board.
- **Check for understanding:** Have students read page 10. Have them write any answers that they found in the *L* column and new questions in the *W* column of their KWLS / ask-and-answer-questions worksheet. Invite students to share the information they recorded with the class and record it on the class chart.
- Invite students to share the important details they found in the section titled "At the Launchpad." Record their answers on the board. Have students work with a partner to figure out the main idea on the basis of the details (*how a model rocket takes off*). Discuss answers as a class and write the main idea on the board with the supporting details.

- Have students read the remainder of the book. Remind them to look for and record answers to their questions on their worksheet. Encourage them to add any new questions to their worksheet that might come up while they are reading.



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:** *Earlier, I wanted to know what the rocket is placed on. I learned that it is called a launchpad and that it needs to be placed in a wide-open area. The rocket needs to be placed over the guide wire on the pad in order for it to stay standing upright. I will record this information on my chart.*
- Invite students to share all the questions they added to their KWLS / ask-and-answer-questions worksheet while they read the book. Ask them which questions they found answers to and which ones were left unanswered.
- Reiterate to students that by asking questions and looking for their answers before and during reading keeps readers engaged in the topic of the book. It also makes readers want to continue reading to find the answers to the questions they asked. This process helps readers better understand and remember what they have read.
- Ask students to raise their hand if they wrote down questions that were not answered. Ask them what resources they could use to find the answers to their questions (books, Internet, magazines, and so on). Have students fill out the final section (S) on their worksheet with all of the information they would still like to learn about model rockets.

Reflect on the Comprehension Skill

- **Discussion:** Discuss how stopping to review all the important details helped students remember and better understand the information in the book. Ask them to use the supporting details they found to confirm or revise the main idea.
- **Independent practice:** Introduce, explain, and have students complete the [main-idea-and-details worksheet](#). If time allows, discuss their answers.
- **Enduring understanding:** In this book, you learned about the history of model rockets as well as the parts of model rockets, how they take off, and what clubs and competitions there are. Now that you know more about model rockets, would you want to learn how to launch one and get involved in competitions?

Build Skills

Phonics: Consonant *sh* digraph

- Write the words *shoots* and *push* on the board and say them aloud with students.
- Have students say the /sh/ sound aloud. Run your finger under the letters of each word as students read it aloud. Ask students to identify which letters represent the /sh/ sound in the word *shoots* and *push*.
- Underline the *sh* digraph in each word. Explain to students that when the letters *s* and *h* are put together, they make the /sh/ sound at the beginning of the word *shoots* and the end of the word *push*.
- Have students practice writing the *sh* digraph on a separate sheet of paper. Encourage them to practice saying the /sh/ sound as they write the letters.

- **Check for understanding:** Write the following words on the board that contain the /sh/ sound, but leave off the *sh* digraph: *shape, whoosh, wash*. Read each word aloud. Have students complete each word with the missing letters by writing them on a separate piece of paper. Then, have students read each word aloud to a partner.

Grammar and Mechanics: **Exclamation marks**

- Ask students to turn to page 4 and read the following sentence: *Three . . . two . . . one . . . liftoff!* Point out the exclamation mark at the end of the sentence. Explain or review that an *exclamation mark*, or *exclamation point*, is a punctuation mark used to show strong feelings or excitement.
- Point out that the author does not use an exclamation mark at the end of every sentence even though it is a fun and exciting topic. Explain that the overuse of exclamation marks is repetitive and considered poor writing because it does not accurately convey the voice of characters or narrators.
- Have students look at the last sentence in the first paragraph on page 4. Read the sentence aloud (*The rocket can fly up to 1,500 feet [457 m] high!*) Discuss with students why the author chose to place an exclamation mark at the end of this sentence (to show that the author was amazed and excited about how high model rockets can fly).
- Have students work with a partner to find other sentences in the book that end in an exclamation mark. Invite students to share the sentences they found and discuss why each example was an appropriate sentence to end with an exclamation mark.
- **Check for understanding:** Ask students to write their own sentence that ends in an exclamation mark on a separate sheet of paper. Have students read their sentence aloud and explain why the sentence they wrote should end with an exclamation mark.
- **Independent practice:** Introduce, explain, and have students complete the **exclamation marks worksheet**. If time allows, discuss their answers.

Word Work: **Syllable patterns**

- Review or explain that a *syllable* is a *word part that contains one vowel sound*. Remind students that a single vowel sound can have one letter or two or more letters together. Explain that being able to identify the syllables in an unfamiliar word can help a reader pronounce it.
- Write the word *hundred* on the board. Have students clap the number of syllables they hear in the word (two). Show students how they can divide the word between the double consonants *n* and *d*.
- Underline the first syllable *hun* and explain to students that it is called a *closed syllable* because the vowel falls between two consonants. Explain that the vowel is usually short in a closed syllable, so when they are trying to read the word, they should try a short sound first. Have them read the syllable (*hun*).
- Point out the second syllable, *dred*, and remind students that this is once again a closed syllable, so the vowel sound is most likely short. Read the word by blending the two syllables together.
- **Check for understanding:** Write the words *compete, building, and fastest* on the board. Ask students to identify the two syllables in each word. Have them read the two syllables in each word and then read each word by blending the two syllables together.
- **Independent practice:** Introduce, explain, and have students complete the **syllable patterns worksheet**. If time allows, have students discuss their answers after they finish the assignment.

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 share their KWLS / ask-and-answer-questions worksheet with someone at home, explaining how it works and what they learned about model rockets.

Extend the Reading

Informational Writing and Art Connection

Provide students with print and Internet resources that explain how real rockets work, when they are used, and more about the history of them. Have students work with a partner to write an informational report. If time allows, have them create a poster of a real rocket with all of the parts labeled. Have pairs share their reports and diagrams with the class.

Visit WritingA-Z.com for a lesson and leveled materials on informational writing.

Science Connection

Provide students with a kit to build and design their own model rocket. After building the rockets, go out to the playground and allow students to set them off to see whose goes the highest.

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.
- 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, and locate answers to their questions in text and write them on a worksheet;
- accurately identify the main idea and supporting details to better understand the text during discussion and on a worksheet;
- consistently identify vowel digraph *sh* sound during discussion and in the text;
- correctly identify and use exclamation marks during discussion and on a worksheet;
- accurately identify syllable patterns during discussion and on a worksheet.

Comprehension Checks

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