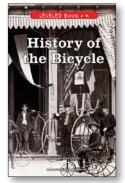


Lesson Plan

History of the Bicycle



About the Book

Text Type: Nonfiction/Informational Page Count: 16 Word Count: 497

Book Summary

Bicycles are popular all around the world, but did you know the bicycle has been around for almost two hundred years? *History of the Bicycle* discusses how this machine has changed over time. Students will also learn how the technology is continuously improving and get a glimpse into what the future may hold for this popular form of transportation, leisure, and sport.

About the Lesson

Targeted Reading Strategy

Connect to prior knowledge

Objectives

- Connect to prior knowledge to understand text
- Compare and contrast information
- Identify vowel pattern VCe
- Understand the use of prepositions
- Understand homophones then and than

Materials

Green text indicates resources are available on the website.

- Book—History of the Bicycle (copy for each student)
- Chalkboard or dry-erase board
- Dictionaries
- Connect to prior knowledge, compare and contrast, prepositions, homophones worksheets
- 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

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

• Content words:

Story critical: bicycles (n.), design (n.), frame (n.), gear (n.), invention (n.), materials (n.) Enrichment: iron (n.), pedals (n.), rods (n.)

Before Reading

Build Background

- Ask students if they have a bicycle. Ask them what they know about how bicycles work, what all bicycles have in common, and so on.
- Show students the cover of the book, and ask them if their bicycle looks like the ones in the photograph. Ask them how long they think bicycles have been around. Explain to them this book will explain the history of the bicycle.



Lesson Plan (continued)

History of the Bicycle

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: Connect to prior knowledge

- Explain to students that effective readers use what they already know about a topic to understand and remember new information as they read a book. Discuss with students how connecting to prior knowledge will help them understand and remember what they read.
- Model how to make connections.

 Think-aloud: As I read this book, I am going to look at the photographs and think about what I have read. Then, I will think about what I already know about bicycles. This is called prior knowledge. After thinking about what I know, I will read the story and use my prior knowledge about bicycles to help me figure out new information in the book. As I read and think about things I already know, it may spark further curiosity and questions that I would like to have answered.
- Have students continue to preview the rest of the book, looking at the illustrations, covers, and glossary. Ask them open-ended questions to facilitate the discussion: What do you see? What do you think is happening? When do you think the photographs were taken? Why?
- Introduce and explain the connect-to-prior-knowledge worksheet. Have them read the sentences and write Yes or No to complete the column on the left.
- 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 effective readers can look for the way an author organizes information in a book. One way authors do this is by telling how topics are alike and different. This is called comparing and contrasting. Write the words Compare and Contrast on the board. Write the word alike under Compare and different under the word Contrast. Encourage students to think of the terms as partner words.
- Explain that one way to compare and contrast is to use a graphic organizer called a *Venn diagram*. Draw a Venn diagram on the board. Explain that when comparing and contrasting using a Venn diagram, details that are the same are listed in the middle where the circles overlap; details that are different are listed on the corresponding sides.
- Model how to compare and contrast using a Venn diagram. Place a pen and a pencil on the table and ask students to tell how the items are alike and how they are different.
 Think-aloud: A pen and a pencil are alike because they both are used for writing. A pencil is different from a pen because it has lead instead of ink and usually has an eraser on the end. A pen may write in various colors, usually cannot be erased, and usually has a lid or a cap.
- Model filling in the diagram on the board with information from the think-aloud.

Introduce the Vocabulary

• Write the following words on the board or chart paper: bicycles, design, invention, and materials. Have students clap or count the number of syllables as you read the words aloud. Explain how to use word-attack strategies to help them read words with more than one syllable. For example, have students find the word invention on page 5. Suggest to students that they can look for base words, prefixes and suffixes, and other word parts to help them say a difficult word (such as in-ven-tion).



Lesson Plan (continued)

History of the Bicycle

- Remind students to look for clues to a word's meaning in the sentence that contains the unfamiliar word, as well as in sentences before and after. For example, point out the word materials on page 13. Read aloud the sentence it appears in. Ask them to think about what sorts of things could make a bike stronger, faster, and lighter. Have them identify a word that means the same thing as materials on the basis of the context of the sentence and their background knowledge (items, objects, things).
- Remind students that they should check whether unfamiliar words make sense by rereading the sentence in which they appear. Reread the sentences that the content words appear in, asking students to substitute in another word that might mean the same thing. Ask students if the word makes sense in that sentence.

Set the Purpose

• Have students read to find out more about bicycles. Remind them to think about what they already know while reading.

During Reading

Student Reading

- Guide the reading: Read page 4 aloud with students. Model connecting to prior knowledge. Think-aloud: When I read the introduction, I thought about how big the number one billion is. But then it made me think that just about everyone I know has a bicycle, so that makes sense! Connecting what I just read to what I know in my life helps me understand the book. It also makes me interested to read more.
- Check for understanding: Have students read to the end of page 6 and study the illustration and photograph. Ask them if the information or images made them think of anything from their own life, from other books they have read, or from movies, television, or the Internet. For example, say: I have seen bicycles like these in a TV show.
- Have students read page 7. Remind students again about what it means to compare and contrast information. Create a new Venn diagram on the board, and label the two sides *Bicycles in the Past* and *Bicycles Today*. Discuss the information on pages 5 through 7, and ask students to use the information from the book and their knowledge about their own bike or what they know about bikes to help you record the appropriate information on the diagram (for example, you might write *no pedals* and *tires made of iron or wood* on the left side the diagram; *pedals* and *tires made of rubber* on the right side; *two wheels* in the center). Using the information on the chart, ask volunteers to point out what the two types of bicycles have in common and what is different.
- Have students read the remainder of the book. Encourage them to connect new information to their prior knowledge as they read. Remind them also to look for similarities and differences regarding the topics in the book.

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 share any examples of how connecting with their prior knowledge helped them (encourage them to think aloud for other students in the group). Reinforce that stopping to think about what they already know and what they are reading helps them read unfamiliar words and understand new information.



Lesson Plan (continued)

History of the Bicycle

- Think-aloud: When I read the section called "The Future of Bikes" and looked at the timeline on page 14, I thought about how it might feel to ride one of the bikes of the future compared to my bike now. I also thought about recumbent bikes I have seen people riding down the street.
- Independent practice: Have students return to their connect-to-prior-knowledge worksheet and complete the right side. Ask them to compare what they knew before they read the book with what they know after reading it.

Reflect on the Comprehension Skill

- **Discussion**: Review with students the differences and similarities between bikes of the past, bikes today, and bikes of the future.
- Independent practice: Introduce and explain the compare-and-contrast worksheet. Explain to students that they can choose two categories to compare: Bikes of the Past, Bikes Today, or Bikes of the Future. Have them write the two categories they chose above the circles on their worksheet. Have them use the information from the book and their own knowledge to complete the worksheet. If time allows, discuss their responses aloud.
- Enduring understanding: In this book, you learned how bicycles have changed over time and will continue to change. Now that you know this information, what will you think about the next time you get on your bike and pedal away?

Build Skills

Phonics: Vowel pattern VCe

- Write the word *bike* on the board, and have students read it with you. Ask students what sound the vowel makes in the word *bike*. Circle the *e* at the end of the word, and explain that often when a word ends with an *e*, the vowel sound is long. Write the letters *CVCe* over the corresponding letters in the word.
- Have students turn to page 4 and read the last sentence of the first paragraph aloud. Ask them which word in the sentence has the long /i/ sound in the middle of the word and an e on the end (ride). Write the word on the board. Circle the ide letter combination and remind students that this is the CVCe pattern (a vowel between two consonants followed by a silent e).
- Check for understanding: Have students find another word that has a CVCe pattern with a long vowel sound in the second paragraph (time). Write the word on the board, write the letters CVCe over the corresponding letters, and ask students to identify the long vowel sound in the word.
 - Independent practice: Have students locate and circle other CVCe long vowel words in the book. Remind them that not all words that end in e have long vowel sounds. If time allows, discuss their answers.

Grammar and Mechanics: Prepositions

- Review or explain that prepositions are words that show a relationship between things.
 They provide information about the location (inside, outside, and so on), direction (to, under, over, and so on), and time when something happens (after, before, during, since, and so on).
 Prepositions also can explain the relationship between two words (about, with, and so on).
- List common prepositions on the board, such as: about, after, before, below, between, during, for, in, of, out, over, through, until, and with.
- Have a volunteer draw a rabbit on the chalkboard. Have another volunteer draw a log in front of the rabbit. Write the following sentence on the board: *The rabbit goes* _____ the log.
- Draw a line from the rabbit over, under, through, beside, and to the log, one at a time. Have volunteers fill in the blank with the correct preposition.
- Write the following sentence on the board: *People started building bicycles in the 1800s*. Point to the word *in*. Have a volunteer explain how the preposition is used in this sentence (it explains when something happened). Have students turn to page 4 and read the first sentence in the second paragraph. Point out the word *over*, and repeat the process.



Lesson Plan (continued)

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Check for understanding: Have students look through the text and circle examples of prepositions. On the board, record the prepositions students identify in the book. Discuss the type of information each preposition provides (how, when, where, why, and so on) and how each one links the words in the sentence.

• Independent practice: Introduce, explain, and have students complete the prepositions worksheet. If time allows, have students share their answers.

Word Work: Homophones then and than

- Write the following sentences on the board. We will go to school, and then we will go home. My dog is bigger than yours. Circle the words then and than. Ask students to explain the meaning of each word (then refers to time; than is used to compare two things).
- Point out the words sound the same when pronounced but are spelled differently and have different meanings. Review or explain that these words are called *homophones*.

Have students find the words *then* and *than* on page 4. Ask them to underline or highlight the words, and have a volunteer read each sentence. Discuss how the words are used differently to mean different things.

- Check for understanding: Write the following sentence on the board: Back ______, there were more _____ one hundred bicycle factories in America. Have students help you decide where then and than should be placed in the sentence.
- Independent practice: Introduce, explain, and have students complete the homophones worksheet. When students are finished, discuss their sentences 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 them discuss the similarities and differences in bicycle design over time.

Extend the Reading

Informational Writing Connection

Have students choose an everyday object (for example, pencils, calculators, clocks, cameras, roller skates, and so on), and research the history of the object. Assist students in using search engines or library resources correctly to find accurate facts. Then, have them write three paragraphs detailing how the object has changed over time and what it might look like in the future. Ask them to title their writing "The History of ______"

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

Social Studies Connection

Provide print and Internet resources for students to learn more about bicycle design over time (including the ideas and flaws of the ordinary). Have them record interesting information on sticky notes or index cards, and facilitate a discussion once everyone has finished researching.



Lesson Plan (continued)

History of the Bicycle

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 connecting to prior knowledge to understand nonfiction text during discussion and on a worksheet
- · accurately compare and contrast details from the text during discussion and on a worksheet
- accurately identify words with the VCe pattern during discussion and in the text
- correctly understand the use of prepositions during discussion, in the text, and on a worksheet
- identify and understand the difference between the homophones *then* and *than* in the text, during discussion, and on a worksheet

Comprehension Checks

- Book Quiz
- Retelling Rubric