

About the Book

Text Type: Nonfiction/Biography Page Count: 24 Word Count: 2,437

Book Summary

Albert Einstein is a biographical text about the accomplishments of the renowned scientist. Readers learn about his theories that changed the way people think about the universe. Information about Einstein's hobbies, struggles, and opinions allows readers to gain insight into the personal side of his character. Famous quotes begin each section, and photographs and diagrams support the text.

Book and lesson also available at Levels T and W.

About the Lesson

Targeted Reading Strategy

- Ask and answer questions

Objectives

- Ask and answer questions to understand informational text
- Sequence events
- Identify and use hyphenated compound adjectives
- Identify and read number words in the text

Materials

Green text indicates resources are available on the website.

- Book—*Albert Einstein* (copy for each student)
- Chalkboard or dry-erase board
- Index cards
- KWLS / ask and answer questions, sequence events, hyphenated compound adjectives, number words 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: *advocated* (v.), *atoms* (n.), *influential* (adj.), *molecules* (n.), *patent* (n.), *physics* (n.)

Enrichment: *algebra* (n.), *compass* (n.), *nationalism* (n.), *pore* (v.), *prestigious* (adj.), *revolution* (n.)

Before Reading

Build Background

- Write the name *Albert Einstein* on the board. Ask students to share what they know about the scientist. Explain that *Albert Einstein* was an important scientist whose ideas influenced many new theories and inventions. Ask students whether they know anything about Einstein's work.

Lesson Plan *(continued)*

Albert Einstein

- Create a KWLS chart on the board and hand out the [KWLS / ask-and-answer-questions worksheet](#). Review or explain that the *K* stands for knowledge we know, the *W* stands for information we want to know, the *L* stands for the knowledge we learned, and the *S* stands for what we still want to know about the topic. As various topics are discussed, fill in the first section (*K*) on the board with information students know about the topic. Have students complete the same section of their KWLS worksheet.
- Ask students what they would like to know about Albert Einstein. Have them fill in the second section (*W*) of their worksheet. Write their questions on the class chart.

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.
- Preview the title page. Talk about the information on the page (title of book, author's name).
- Ask students to turn to the table of contents. Remind them that the table of contents provides an overview of what the book is about. Ask students what they expect to read about, based on what they see in the table of contents. (Accept all answers that students can justify.)

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

- Discuss how having prior knowledge about the topic, and asking and answering questions while reading, can help readers understand and remember the information in a book.
- Direct students to the table of contents. Remind them that the table of contents provides an overview of the information in a book and the way in which it is organized. After previewing the table of contents, use it as a way to model asking questions.
Think-aloud: I can use the table of contents to think of questions I'd like to have answered about Albert Einstein. For example, the second section is titled "A Talented, Curious Boy." I know that Einstein grew up to be a very important scientist, but I don't know what his talents were and what he was curious about as a young boy. I'll have to read the book to find out. I'll write that question in the W section of the KWL chart.
- Have students look at the other section titles. Write any questions they have based on the covers and table of contents in the *W* section of the KWLS chart.
- Have students preview the rest of the book, looking at diagrams, photos, and captions. Point out the "Do You Know?" boxes containing more information. Show students the glossary. Have them add any additional questions they might have about the book to their KWLS chart. Write shared questions on 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: **Sequence events**

- Review or explain that writers present the events of a story in a particular order. Signal words are often provided to help readers identify the order of the events. Ask students to identify examples of signal words (*today, first, next, then, last, finally, dates, and so on*).
- Model how to sequence events.
Think-aloud: I know that a process, like a story, has a sequence of events. For example, when I call someone on the phone, first I lift the receiver off the hook. Next, I dial the number using the number pad on the phone. Then, I hold one end of the receiver to my ear. Last, I speak into the other end of the receiver.
- Have volunteers explain the order of a simple process, such as making a sandwich or getting ready for school. Use time and order words (*first, next, and so on*) to record the steps on the board.
- Show students an example of a timeline. Explain that timelines are created as events are listed in order. Explain to students that they will be creating a timeline of the events that are included in this book. Introduce and explain the [sequence events worksheet](#).

Introduce the Vocabulary

- Write the following words from the content vocabulary on the board: *atoms, physics, molecules*.
- Point out that these three words can be found in the text and that knowing what they mean will help students understand what is happening as they read the book. Give groups of students three pieces of blank paper and have them write one of the three vocabulary words on each page. For each word, have them write or draw what they know about the word. Create a definition for each word using students' prior knowledge.
- Point out the glossary at the back of the book. Review or explain that a glossary and a dictionary contain lists of words and their definitions.
- Model how students can use a dictionary to find a word's meaning. Have them locate the word *physics* in the dictionary. Invite a volunteer to read the definition for *physics*.
- Have students compare the dictionary definition with the glossary definition, pointing out the similarities and differences (glossaries only contain definitions for vocabulary words in that particular story, dictionaries contain longer and sometimes multiple definitions, and so on). Have them compare these with their prior knowledge of the word.
- Have students follow along on page 11 as you read the sentence in which the word *physics* is found to confirm the meaning. Repeat the exercise with the remaining vocabulary words.

Set the Purpose


- Have students read the book to find answers to their questions about Albert Einstein and his scientific ideas. Remind them to categorize the information by elements of a biography and use that information to generate new questions.

During Reading

Student Reading

- **Guide the reading:** Have students read to the end of page 7. Remind them to look for information about Albert Einstein and the events of his life that will answer questions on their KWLS chart. Encourage students who finish early to go back and reread.
- When they have finished reading, have students discuss the information in each section and share what they learned about Einstein's accomplishments, influence, and/or personality. Have students circle any questions on their KWLS chart that were answered and add any new questions that were generated.
- Model answering a question on the KWLS chart and filling in additional information.


Think-aloud: I wanted to know what Einstein was curious about as a young boy. I found out that Einstein was both curious about and talented in math and science. His curiosity about how things worked led him to enter college early. I also found out that his strong sense of independence and curious nature made him unpopular with his teachers. I'll write what I learned in the L section of my KWLS chart. This information made me want to know whether Einstein had difficulty finding a job. I will write this question in the W section of my KWLS chart.


 Have students discuss and circle the events on pages 4 through 7 that are the most important to correctly tell the story of Einstein's life so far. Record the information in a timeline on the board, and have students fill in their sequence events worksheet. (March 14, 1879—Albert Einstein born in Ulm, Germany. 1880—family moved to Munich; sister Maja was born. At 5, father showed him a magnetic compass; he became curious. At 6, mother encouraged him to play violin. Father and two uncles introduced him to math and science. A medical student gave him science, math, and philosophy books. In school, Einstein questioned everything; struggled with established rules. At 15, left German school; joined parents in Italy. Moved to Switzerland to finish school. At 17, accepted into one of the finest scientific universities in Europe.)


Lesson Plan *(continued)*

Albert Einstein

- Ask students to tell what the book is mostly about so far (Albert Einstein's life). Review the events on the timeline on the board. Point out that other information in the book includes details that make the book interesting but are not important to the sequence of Albert Einstein's life. Explain that supporting details are not included in a timeline; only the most important information is listed in the most concise wording possible. Point out that complete sentences aren't necessary when writing notes for a timeline.
- **Check for understanding:** Have students read pages 8 and 9. Have them write answers they found while reading in the *L* section of their KWLS worksheet and additional questions they raised in the *W* section. Invite them to share the information they learned and the questions they generated as they read the book. Record shared responses on the class KWLS chart.

 Ask students to circle additional important events in the book. Discuss the important events as a class and write them on the board in order. Have students fill in their timeline on the sequence events worksheet. (1900—finished school; had difficulty finding a job. 1902—took a job as a patent clerk in Bern, Switzerland. Olympia Academy—exchanged scientific ideas and developments in philosophy.) Invite students to make additions and corrections in their book.

 Have students read the remainder of the book. Remind them to look for and write answers to their KWLS worksheet questions. Encourage them to add new questions they might have to their worksheet as they read, and to circle the important events.

 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:** *I wanted to know whether Einstein had difficulty finding a job. I found out that his curious and independent personality led him to have some difficulty finding a job. However, I learned that Einstein displayed perseverance in his pursuit of studying science and eventually got a job in a patent office. This job allowed him the opportunity to work on his ideas.*
- Ask students to share questions they added to their KWLS worksheet while reading, and ask them what questions were answered (or not answered) in the text.
- Reinforce that asking questions before and during reading, and looking for the answers while reading, keeps readers interested in the topic. It also encourages them to keep reading to find answers to their questions and helps them understand and remember what they have read.
- Point out to students that all of their questions may not have been answered in this text. Brainstorm other sources they might use to locate additional information to answer their questions. Invite students to fill in the final section (*S*) with information they would still like to know about Albert Einstein.

Reflect on the Comprehension Skill

- **Discussion:** Review the sequence of events that was identified and written on the board. Practice restating the events using sequencing words (*first, next, then, after that*, and so on). Point out how it is important for students to use their own words to write about each event.



Ask students which additional important events they circled in the book. Discuss the important events on pages 10 through 16. Write them in the timeline on the board while students add to their timelines on the sequence events worksheet. (1905-German scientific journal published Einstein's papers; scientists were astounded- "Miracle Year." 1909-began full-time work at a university. 1914-spoke out against WW1. 1915-General Theory of Relativity. 1919-solar eclipse theory proven. 1921-news reporters greet Einstein in New York. 1930-published *The World as I See It*.) Invite students to make additions or corrections in their book

- **Independent practice:** Have students complete the timeline on their sequence events worksheets, recording the important details from pages 17 through 22. When students finish, discuss their answers aloud.
- **Enduring understanding:** In this book, you learned about Einstein's many accomplishments. Now that you know this information, how do you feel about his motivation to succeed and the changes he underwent throughout his life? How did his experiences shape him as a person? Which personality traits served him well in life?

Build Skills

Grammar and Mechanics: Hyphenated compound adjectives

- Review or explain that *adjectives* are words that describe nouns or pronouns. An adjective tells *which one, how many, or what kind*.
- Write the following sentence on the board: *Einstein's scientific ideas continue to influence new theories*. Have individual students come to the board and circle the adjectives in the sentence (*scientific, new*). Then have them underline the noun that each adjective describes (*ideas, theories*).
- Explain to students that some adjectives are hyphenated and that they are called *hyphenated compound adjectives*. Write the following sentence on the board: *The ideas came from a curious 26-year-old patent clerk*. Have a volunteer come to the board and underline the hyphenated compound adjective (*26-year-old*). Have another volunteer underline the noun that the adjective describes (*clerk*).
- Write the following sentence on the board: *When he was only 17 years old, he was accepted into college*. Point out that the phrase *17 years old* is not hyphenated. Discuss the differences between the uses of the two phrases. (*26-year-old* is used as an adjective phrase describing *clerk*.) Ask a volunteer to give an example of when the phrase *17 years old* would be hyphenated. (He was a 17-year-old boy.)




Check for understanding: Have students work in pairs to underline all of the compound adjectives in the book. Discuss their findings as a group (page 11: *26-year-old, well-known*; page 12: *full-time, self-critical*; page 18: *close-knit, out-of-town*; page 20: *flat-screen*).

- **Independent practice:** Introduce, explain, and have students complete the **hyphenated-compound-adjectives worksheet**. If time allows, discuss their answers aloud.

Word Work: Number words

- Direct students to page 7. Read the first sentence of the third paragraph aloud. Explain to students that when reading aloud, readers will sometimes encounter different symbols, numbers, and abbreviations within the text. Good readers read these parts of the text fluently, just as they read the words.
- Ask students to locate three numbers within the first paragraph on page 11 (*six, two hundred, 26*). Write the numbers on the board. Review or explain that when reading the sentences aloud, the numbers are read in the same manner as the words. Explain that sometimes students will find numbers spelled out, such as *six* and *two hundred*. At other times, they will find numbers written as numerals, such as 26.

 Have students turn to page 16. Ask them to locate at least three numbers within the text (1914; 100; 1921). Have students write the word equivalents for each number (*nineteen fourteen; one hundred; nineteen twenty-one*).

- **Check for understanding:** Have students work with a partner to practice reading number words found in the text. When everyone has finished, ask volunteers to write the numbers and the accompanying number words on the board.
- **Independent practice:** Introduce, explain, and have students complete the **number words worksheet**. If time allows, discuss their responses.

Build Fluency

Independent Reading

- Invite 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 worksheets with someone at home, explaining how it works and what they learned.

Extend the Reading

Informational Writing and Art Connection

Provide print and Internet sources for students to find out more about the Nobel Prize. Have them look for information to answer such questions as who has received the prize and why it is so prestigious. Instruct students to write a report on their findings. Require that they have at least three sections, including an introduction and conclusion. Encourage them to add illustrations or photographs to their report. 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 WritingA-Z.com for a lesson and leveled materials on informational report writing.

Science Connection

Provide print and Internet resources for students to research more about Einstein's theories and scientific breakthroughs. Provide index cards on which students can record their notes as they research. Ask them to find out more about the opinions of other scientists of the time compared to Einstein's. Facilitate a round-table discussion in which students can share and further discuss their findings. Encourage them to share their opinions.

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 the topic prior to and during reading; locate answers to their questions in text during discussion and on a worksheet
- accurately sequence events in the text during discussion and on a worksheet
- correctly recognize hyphenated compound adjectives used in the text during discussion and on a worksheet
- accurately read number words in text during discussion and on a worksheet

Comprehension Checks

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