



About the Book

Text Type: Nonfiction/Biography Page Count: 16 Word Count: 1,594

Book Summary

Nikola Tesla was a brilliant scientist whose work and inventions had a huge effect on technology. *The Genius of Tesla* recounts the major events of his life, with a focus on his contributions to the study of electricity and the invention of the radio. Photographs and charts aid in the explanation of scientific phenomena, illustrations and photographs paint his life in concrete vividness, and a timeline accompanies the text.

Book and lesson are also available for Levels R and U.

About the Lesson

Targeted Reading Strategy

- Retell

Objectives

- Retell to understand text
- Sequence events in the text
- Identify and use past-tense verbs
- Define and use the suffixes *-ed* and *-s*

Materials

Green text indicates resources are available on the website.

- Book—*The Genius of Tesla* (copy for each student)
- Chalkboard or dry-erase board
- Sticky notes
- Sheet of paper
- Highlighters
- Sequence events, past-tense verbs, suffixes *-ed* and *-s* 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

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

Content words:

Story critical: **electricity** (n.), **engineer** (n.), **experiments** (n.), **inventions** (n.), **patents** (n.), **visionary** (n.)

Enrichment: **coil** (n.), **current** (n.), **efficiently** (adv.), **generator** (n.), **investors** (n.), **voltage** (n.)

Before Reading

Build Background

- Flick the lights in the room off and on. Ask students to raise their hand if they know what causes the lights to work in the room, televisions to run, and the air conditioner to turn on. Write the word *electricity* on the board, and have students read it aloud.

- Have students do a quick write on electricity: spend an entire minute writing everything they know about the subject without stopping. Have students discuss with a partner what they wrote. Invite volunteers to come to the board, write a detail about electricity, and explain it to the rest of the class.
- Explain to students that people discovered electricity and how it worked before they could use it to power houses and stores. Each new experiment helped scientists to know the nature of electricity and how to use it. Write the name *Nikola Tesla* on the board and read it aloud to students. Explain to students that Nikola Tesla is responsible for many of the ways we use electricity and technology today.

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: **Retell**

- Review with students that engaged readers stop now and then while they are reading to retell in their mind what is happening in the story. Point out that retelling helps readers remember and understand what they are reading.
- Remind students that a reader retells a story or biography with events in the correct order.
- Model how to retell a life event, such as what you did the previous day.
Think-aloud: *Yesterday, I started the day by getting out of bed, cleaning up, and putting on my clothes. I chose my favorite shirt and comfortable shoes. Then, I hopped in my blue car and drove to school. When I arrived, I hurried to the classroom and spent some time getting out materials for the day, such as overheads and worksheets. I put bell work on the board. Then, my students arrived! We spent the day learning. We read books and worked on math and writing. We performed science experiments. The school day was over when the bell rang at 2:30. Students left to catch the bus or meet their parents. After everyone was gone, I cleaned the classroom and prepared for the next day. Next, I graded papers. I wrote plans and made copies of class activities. Then, I drove home. After that, I made dinner: spaghetti and a salad. It was delicious! I relaxed with my favorite book. Finally, I got ready for bed by brushing my teeth and putting on fuzzy pajamas. I fell asleep.*
- Remind students that retellings include as many details as possible, unlike a summary, which only uses the most important details. Ask students to think about what details you could have left out of your retelling, while still giving an understandable summary of the day. Invite volunteers to share these nonessential details with the rest of the class.
- Have students discuss with a partner how the retelling would be different if the events were told out of order. Invite volunteers to share their thoughts with the rest of the class. Discuss with students why retellings must describe events in the correct sequence.
- Write the words *first*, *then*, *next*, *after that*, and *finally* on the board. Have students read the words aloud. Explain to students that these transition words help clarify the order of events. Point out that the words *then*, *next*, and *after that* can be used interchangeably to describe details in the middle. Ask students to identify the only word that can be used for the first event and the only word that can be used for the last event.
- Have students retell to a partner the events of their day. Remind them to use as many details as they can remember and to describe the details in the order they occurred. Invite volunteers to share their retelling with the rest of the class.
- Give each student a pack of sticky notes, and have them place notes at the bottom of pages 5, 7, 11, 13, and 15. Explain that as they read, they should stop every time they see a sticky note and retell in their mind what they have read so far. Point out that sometimes they will be asked to share a retelling with a partner or the class.

- 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 to students that keeping track of the order in which the events happen in a text is important to understanding the story. Remind students that a sequence of events describes the correct order of events. Point out that a biography follows the events of a person's life in order from birth to death.
- Review with students the transition words written on the board and used in the retelling: *first, then, next, after that, and finally*. Explain to students that these words help describe a sequence of events as well as serve to organize a retelling.
- Model sequencing the main events of a familiar story, such as *Little Red Riding Hood*.
Think-aloud: *To create a sequence of events for the story Little Red Riding Hood, I start with what happens in the beginning and step to each subsequent event in the right order. First, Red Riding Hood takes a basket of goodies to her grandmother's house. Next, the Big Bad Wolf tricks her into wasting time. Then, the Big Bad Wolf rushes to the grandmother's house and tries to eat the grandma! After that, Red Riding Hood arrives and realizes something is wrong with her grandmother. Next, the wolf tries to eat her, but the woodcutter hears them and bursts into the house. Finally, the woodcutter kills the wolf and saves Little Red Riding Hood and her grandmother.*
- Point out that a sequence can be simple, describing just the most important details, but in a retelling the sequence is filled with many details from the story.
- Have students work with a partner to pick another story the class has read previously. Have students determine the sequence of events for the story. Remind students they are working on a sequence, not a retelling, so they only need to include enough details to describe the main events in order.
- Invite volunteers to share with the rest of the class the title of the story they chose and their sequence of events for it. Remind students to use transition words to organize their sequence.

Introduce the Vocabulary

- Introduce the story-critical vocabulary words listed in the vocabulary section of this lesson.
- Remind students of the strategies they can use to sound out words they don't know. For example, they can use what they know about letter and sound correspondence to figure out the word. They can look for words within words, and prefixes and suffixes. They can use the context to work out the meanings of unfamiliar words.
- Have students divide a separate sheet of paper into four rectangles. Have students write the word *electricity* in the first rectangle. Ask students to discuss with a partner what they know about the word, and have students write the definition in their own words in the second rectangle.
- Have students draw a picture for the word *electricity* in the third rectangle. In the fourth one, have students write a sentence that reflects the word's meaning.
- Have students repeat the process with the remaining vocabulary words. Invite volunteers to share a sentence with the rest of the class, and have other students give a thumbs-up signal if the sentence accurately reflects the word's meaning.
- Turn to the glossary on page 16. Have students point to a vocabulary word and invite a volunteer to read its definition aloud. Discuss with students how the definitions in the story compare with those the class wrote on the separate sheet of paper.

Set the Purpose

- Have students read to find out more about Nikola Tesla's life and accomplishments. Encourage students to retell as they read and to keep details ordered in the correct sequence of events.

During Reading

Student Reading

- **Guide the reading:** Have students read from page 4 to the end of page 7. Encourage those who finish early to go back and reread.
- **Model retelling.**
Think-aloud: *To retell the information from the first section of the story, I thought about as many details as I could remember and retold them in my own words. The story began by describing an event in a laboratory. Nikola Tesla invited people in New York City to watch one of his experiments. First, he sat calmly in a wooden chair on a stage above an electrical generator. After that, he flipped a switch and streaks of light sparked across the room, some hitting Tesla. Then, the demonstration was over, and the crowd applauded when it saw Tesla unharmed. Tesla seemed like a magician, but really he was a scientist demonstrating a recently discovered form of electric current. Alternating current was a new and safer alternative that changed the world and became an important part of modern electricity. Tesla was a visionary who challenged scientists with his inventions and ideas. He led the way to important inventions such as smartphones and televisions. However, while he was a genius at science, he was not good at business and died broke while his ideas made millions of dollars for others.*
- Discuss with students why the story starts with an episode from the middle of Tesla's life. Explain to students that often biographies and other stories will start in the middle of the action, meaning they pick an exciting event from the story to grab the reader's interest. After the introduction, the story goes back to the beginning and proceeds in the correct sequence from that point. Have students review page 6, and ask students to discuss with their partner whether the biography goes back to the beginning of Tesla's life.
- Emphasize the transition words you used in the retelling (*first, after that, and then*). Remind students that they need to use a correct sequence of events when they create a retelling.
- Have students retell to a partner what happens on pages 6 and 7. Remind students to organize the retelling with the correct sequence of events and to use transition words to help in the retelling and the sequencing. Invite volunteers to share their retelling with the rest of the class. Discuss with students how retellings should always be in the student's own words, and therefore, each retelling will be a little different from the others.
- Ask students to think about the retellings they shared. Have them identify the event that came first. Point out that a sequence of events for a biography will begin with the person's birth. Have them identify the main events in those two pages in the order in which they occurred and write the sequence of events on a separate sheet of paper. Remind students that the sequence does not need to include all of the details from the retelling.
- Have students share their sequence with a partner. Invite volunteers to share their sequence with the rest of the class. Discuss with students the difference between a retelling and a simplified sequence of events.
- Have students highlight the dates on pages 6 and 7. Explain to students that dates are wonderful tools to help keep track of a sequence of events, as the years will clearly show what happened first.
- **Check for understanding:** Have students read pages 8 through 11. Point out the sticky note at the bottom of page 11. Have students write a retelling for these pages on a separate sheet of paper. Have students share their retelling with a partner. Ask students to highlight important dates from these pages.
- Have students think about the order of the events described in these pages. Call on a random student to share the first event. Write the event on the board. Call on another student to describe the event that happened next and write it on the board. If a student chooses the wrong detail, have all students check the story to find the next event, and call on the first person to raise his or her hand to share it. Continue this process until the sequence of events for pages 9 through 12 is complete.

- Ask students to discuss with a partner what transition words they would use to introduce each event. Invite volunteers to come to the board and write an appropriate transition word before each event.
- Have students read the remainder of the book. Remind them to stop at each sticky note and retell the story as they read. Encourage them to work on the sequence of events as they compose their retellings.



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

- Have students retell to a partner the sections “Radio Days” and “The Great Tower.”
Think-aloud: In the last section of the story, “A Lasting Influence,” I read that Tesla died in 1943, when he was eight-six years old. He was living in a hotel paid for by Westinghouse. During his life, Tesla had spent his money on failed projects and never received credit for his research and inventions. Nevertheless, he had a huge effect on technology. His use of AC power changed the way electricity worked in the city and country. His experiments with radio and robots were steps to the future. He foresaw the power of a wireless world before it happened, and his ideas contributed to wireless communication. Tesla’s love of creating made him a giant among scientists. This is how I would retell the final section of the story.
- Explain to students that just as the introduction of a biography sometimes moves outside the sequence of events of a person’s life, the conclusion also has its own job. Explain to students that conclusions often summarize the main points of a story for a powerful ending. Point out that in this final section, the story describes the last event of Tesla’s life—his death—and then finishes the book by summarizing his life and his accomplishments.
- Have students write a retelling of the entire story. Encourage students to focus on one section at a time. Remind students that aside from the introduction and the conclusion, the retelling should proceed in the correct sequence of events of Tesla’s life. Invite volunteers to read their retelling to the rest of the class.
- Have students share with a partner how retelling the story helped them to understand and remember what they read.

Reflect on the Comprehension Skill

- **Discussion:** Discuss with students why the sequence of events is important in a biography. Have them review the retelling they wrote. Ask students to underline each major life event in the retelling and to circle the transition words they used to describe the sequence of events. Have them compare their papers with a partner. Have students highlight important dates from the last pages of the story.
- Using their retelling and highlighted dates as a guide, ask students to work with a partner to draw a timeline of Nikola Tesla’s life. Draw a model of a timeline on the board if necessary. Point out to students that a timeline is simply a sequence of events without all the detail of a retelling. Have students work with their partner to compare their timelines with the one on page 10 in the story. Discuss their comparisons.
- **Independent practice:** Introduce, explain, and have students complete the **sequence events worksheet**. If time allows, have students compare their work with a partner’s worksheet.
- **Enduring understanding:** In this book, you learned about the life of Nikola Tesla. How would the world be different if Tesla were never born?

Build Skills

Grammar and Mechanics: Past-tense verbs

- Write the following sentence on the board: *Tesla wanted to study electricity.* Ask students to point to the verb in the sentence, and invite a volunteer to come to the board and circle it. Remind students that a verb is a word describing actions. Ask students to share with a partner whether this sentence describes action in the present or past.
- Explain to students that *wanted* is a past-tense verb. Explain that a *past-tense verb* is a word that describes *actions that happened in the past*. Cover the suffix *-ed* and ask students to identify the present-tense form of the verb (*want*).
- Point out that adding the suffix *-ed* to the end of a present-tense verb changes it into the past tense. Write the verbs *kick* and *laugh* on the board. Have students change the words to their past-tense forms and write them on a separate sheet of paper. Invite volunteers to share the past-tense forms with the rest of the class, and adjust the verbs on the board.
- Have students work with a partner or individually to reread page 6 and underline all the past-tense verbs. Remind students that most past-tense verbs end in *-ed*, but some verbs have different forms, so they should be looking for all words that describe actions in the past. Invite volunteers to share a verb they underlined, and have other students give a thumbs-up signal if they agree the word is a past-tense verb.
- Have students point to the word *figured*. Explain to students that when a verb ends in the letter *e*, they just add the suffix *-d* to the end of the word to create the past tense. Have students discuss with a partner the reason for this rule (the word already has an *e* at the end). Explain to students that when a verb ends in the letter *y*, they change the *y* to an *i* before adding the suffix *-ed*. Have students find a verb on page 6 that follows that rule (*studied*). Ask students to call out the verb and record it on the board. Invite a volunteer to demonstrate how to change *study* to *studied*.
- Ask students to identify four verbs on page 6 that don't follow the rule of adding the suffix *-ed* (for example: *was*, *had*, *read*, and *built*). Explain to students that these words are *irregular verbs*. Explain that some verbs take an entirely different form when they change from present to past tense. Write the verb pairs *is/was*, *has/had*, *build/built*, and *read/read*. Explain to students that the verb *read* is unusual in that it has the same form in both the present and the past tenses. Have students discuss with a partner which verbs are in the past tense in those pairs, and invite volunteers to come to the board to circle them. Point out to students that they will need to memorize these irregular verbs as they read, but they should still recognize them as verbs, even if their endings are unfamiliar, because they are words that describe actions.
- **Check for understanding:** Have students work with a partner for a verb game. The first student in the pair says a verb in present-tense, the second student gives the verb in its past-tense form, and the first student says a sentence using the verb. Partners switch roles and repeat. Monitor students as they work to ensure they are using the correct word for the past-tense form. After the game is over, invite volunteers to share a sentence with the rest of the class. Call on a different student to repeat the sentence, using the verb in the other tense.
- **Independent practice:** Introduce, explain, and have students complete the [past-tense-verbs worksheet](#). If time allows, discuss their answers.

Word Work: Suffixes *-ed* and *-s*

- Have students share with a partner a past-tense verb they discussed in the Grammar and Mechanics section. Invite volunteers to share a verb with the rest of the class, and record those verbs that end in the suffix *-ed* on the board.
- Explain to students that the *-ed* ending is called a *suffix*. Explain or review with students that a *suffix* is a *word part added to the end of a base word* that changes the nature or meaning of a word.
- Remind students that when the suffix *-ed* is added to the end of a verb, the verb changes from present tense to past tense.

- Write the word *experiments* on the board and read it aloud with students. Point out that this word also has a suffix, but a different one. Ask students to look for the root word, and have them share with a partner their guess on the suffix. Invite a volunteer to come to the board and circle the letter *s* at the end of the word. Explain to students that sometimes the letter *s* can be a suffix for a word.
- Remind students that adding the suffix *-s* to the end of a noun changes it from singular to plural. Invite a volunteer to explain the difference between singular and plural nouns. Write the word *patent* on the board, and have students share with a partner what the word would be if they added the suffix *-s* to the end.
- Write the word *sees* on the board. Ask students to identify whether the word is a noun or a verb. Confirm the word is a verb, and explain that this word also uses the suffix *-s* at the end. Explain to students that some verbs add the suffix *-s* to show a change in subject. For example, the girls see but a girl sees.
- Point out that the word *experiments* can be either a noun or a verb, depending on the context of the sentence. Encourage students to examine the context of a sentence when they see a word with the suffix *-s* to determine if it is a noun or a verb.
- Write the words *invented* and *contracts* on the board. Have students write the words on a separate sheet of paper and circle the suffixes. Invite a volunteer to come to the board and circle the suffix. Have students work with a partner to use the words in oral sentences.
- **Check for understanding:** Pass out two highlighters of different colors to each student. Have students work with a partner to highlight all the words on pages 8 and 9 with a suffix *-ed* in one color and all the words with a suffix *-s* in the other color. In the margins of the book, have the students write the root word for each highlighted example. Invite volunteers to share an example they found with the rest of the class, and have other students give a thumbs-up signal if the word has a suffix of *-ed* or *-s*.
- **Independent practice:** Introduce, explain, and have students complete the [suffixes -ed and -s worksheet](#). If time allows, discuss their answers.

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 demonstrate to someone at home how a reader retells a story while reading.

Extend the Reading

Biographical Writing and Art Connection

Write a list of scientists on the board, and discuss their achievements with students. Have students choose a scientist from the board and research the life of the person. Ask students to find information on the scientist's personality, accomplishments, and influence along with background information such as physical description and family. Provide students with a graphic organizer to record information, and ask students to include important dates with their notes. Have students write a report on their subject, and draw a picture of the chosen scientist. Remind students to include an introduction, body paragraphs, and a conclusion. Ask students to work with a partner to peer edit their reports, and have students complete a final draft. Invite volunteers to share their report and picture with the rest of the class.

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

Science Connection

Read with students a short story or an excerpt about the life of Thomas Edison. Break students into groups, and have them work together to research more about the inventor, focusing on his inventions and influence. Ask each student in the group to record notes on what they learn. Then, have students work with a partner to create a presentation of the facts they learned and present it to the rest of the class. Create a Venn diagram on the board. Have students discuss in groups how they would compare and contrast Thomas Edison and Nikola Tesla. Discuss with students their comparisons and demonstrate how to record them on a Venn diagram. Have students copy the Venn diagram from the board on a separate sheet of paper and fill it in using the notes they recorded. Invite volunteers to share how they filled in their Venn diagram, and add information to the one on board. Have students discuss with a partner which inventor impresses them more, and why.

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 retelling to comprehend the text during discussion
- accurately identify a sequence of events during discussion, in the text, and on a worksheet
- correctly identify and use past-tense verbs during discussion, in the text, and on a worksheet
- accurately use the suffixes *-ed* and *-s* during discussion, in the text, and on a worksheet

Comprehension Checks

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