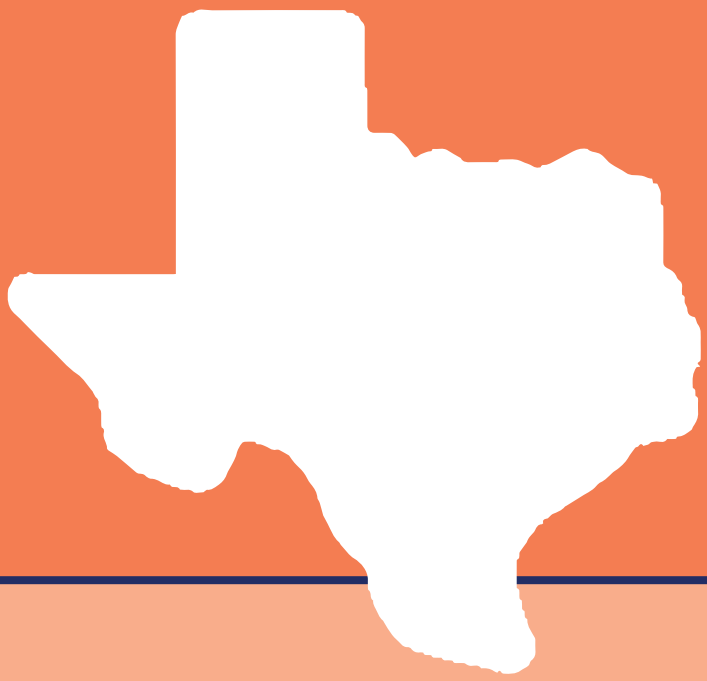
K–5 Reading Language Arts

ENGLISH

FLIGHT AND THE STORY OF AVIATION



GRADE 2 UNIT 11 | TEACHER GUIDE

EDITION 1

Grade 2 | Unit 11

Flight and the Story of Aviation

Teacher Guide

Acknowledgement:

Thank you to all the Texas educators and stakeholders who supported the review process and provided feedback. These materials are the result of the work of numerous individuals, and we are deeply grateful for their contributions.

If you have further product questions or to report an error, please email openeducationresources@tea.texas.gov.

Grade 2 | Unit 11

Contents

FLIGHT AND THE STORY OF AVIATION

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Introduction

FLIGHT AND THE STORY OF AVIATION

This introduction includes the necessary background information to be used in teaching the *Flight and the Story of Aviation* unit. The Teacher Guide for *Flight and the Story of Aviation* contains fifteen daily lessons, each of which is composed of two distinct parts so that the lesson may be divided into smaller chunks of time and presented at different intervals during the day. Each entire lesson will require a total of sixty minutes.

This unit includes a one day Pausing Point following Lesson 8. The activities in the Pausing Point are included to allow time to review, reinforce, and remediate content knowledge.

UNIT COMPONENTS

Along with this Teacher Guide, you will need:

- Activity Book for *Flight and the Story of Aviation*
- Digital Components for *Flight and the Story of Aviation*
- Flip Book for *Flight and the Story of Aviation*
- Image Cards for *Flight and the Story of Aviation*

You will also need a single classroom copy of each of the following trade books, which are available at physical and online bookstores:

- *Up and Away!: How Two Brothers Invented the Hot-Air Balloon* by Jason Henry
- *The Glorious Flight: Across the Channel with Louis Blériot* by Alice and Martin Provensen
- *The Girl Who Could Fix Anything: Beatrice Shilling, World War II Engineer* by Mara Rockliff
- *Helicopter Man: Igor Sikorsky and His Amazing Invention* by Edwin Brit Wyckoff
- *Flight* by Robert Burleigh
- *Aim for the Skies: Jerrie Mock and Joan Merriam Smith's Race to Complete Amelia Earhart's Quest* by Aimee Bissonette
- You will need access to the ReadWorks passage "The Amazing Flying Machine."
- You will also need access to the ReadWorks passage "Overcoming Barriers: Amelia Earhart."

All unit components materials can also be found in the program's online materials.

WHY FLIGHT AND THE STORY OF AVIATION IS IMPORTANT

Students will head up, up, and away with this introduction to the soaring history of aviation. Students will learn the stories of early aviators, such as the Montgolfier brothers, the Wright brothers, Bessie Coleman, and Amelia Earhart. They will study the science of flight, including the physics concept of lift, and will research the social impacts of the world of flight. Finally, students will let their research skills take flight as they explore key figures from the world of aviation. This unit will build on the previous units about the early Greek civilizations and Greek myths in Grade 2, and will lay the foundation for learning about other periods of world history in future grades.

The text that students will be reading and discussing provides opportunities for students to build content knowledge and draw connections to science. You may build on class discussions to support students in making cross-curriculuar connections to the strands of Recurring Themes and Concepts, Scientific and Engineering Practices, and Matter and Its Properties. This is not a replacement for grade-level science instruction.

WHAT STUDENTS HAVE ALREADY LEARNED

The following unit, and the specific core content that was targeted in those units, are particularly relevant to the Read-Alouds students will hear in *Flight and the Story of Aviation*. This background knowledge will greatly enhance students' understanding of the Read-Alouds they are about to enjoy:

Ancient Greeks: Life, Tradition, and Government (Grade 2)

Stories of the Ancient Greeks (Grade 2)

CORE VOCABULARY FOR FLIGHT AND THE STORY OF AVIATION

The following list contains all the core vocabulary words in *Flight and the Story of Aviation* in the forms in which they appear in the Read-Alouds or, in some instances, in the "Introducing the Read-Aloud" section at the beginning of the lesson. Boldfaced words in the list have an associated Word Work activity. The inclusion of the words on this list does not mean that students are immediately expected to be able to use all these words on their own. However, through repeated exposure throughout the lessons, they should acquire a good understanding of most of these words and begin to use some of them in conversation.

Lesson 1 aircraft aviation blades curve determine glider ingredients legend **lift** myth observed recipe technology	**Lesson 5** confidence descend inflated **spherical** wealth	**Lesson 9** **accomplishment** hovered invest rotor stalled
Lesson 2 astonishing hydrogen **innovations** technical tethered	**Lesson 6** tremendous **enthralled**	**Lesson 10** Airman missions escorted **vulnerable**
Lesson 3 **designing** exhibit invention powered orbit pitch roll yaw	**Lesson 7** **aloft** parachute periscope throttle	**Lesson 11** apprentice engineer fuel sputtered tinkered
Lesson 4 aerostat cockpit glorious lever propeller **sputters**	**Lesson 8** achievement advocating altitude **barrier** massive sensation ticker-tape parade transatlantic	**Lesson 12** companions groggy **quest** stunned tailwinds turbulence

CORE CONTENT OBJECTIVES

- Establish the purpose of reading about key figures in the history of aviation
- Explain how the Montgolfier [/Mont*GOLF*ee*air/] brothers invented the hot-air balloon
- Make inferences about the impact of the Wright brothers' first flight on aviation
- Describe Louis Blériot's [/Blair*ee*oh/] flight across the English Channel
- Explain key details about Alberto Santos-Dumont's flying machines
- Actively listen and ask relevant questions to clarify information about Bessie Coleman
- Make and confirm predictions about Charles Lindbergh
- Retell and paraphrase a passage about the barriers that Amelia Earhart faced in her quest to fly around the world
- Make connections between the story of Igor Sikorsky and ideas in other texts
- Discuss the author's purpose for writing about the Tuskegee Airmen
- Discuss how the text structure contributes to the author's purpose
- Make connections between Jerrie Mock and Joan Merriam Smith's endeavor to complete Amelia Earhart's quest to be the first woman to fly solo around the world

WRITING

- In this unit, students will plan, research, draft, and present informational texts to be displayed in an Aviators Hall of Fame. Each lesson will build students' understanding of the research process, including brainstorming, asking questions, gathering information from texts, and writing about what they have learned.
- To show what they have learned, students will choose three aviators from the unit to write three informational texts.
- During this project, students will use the writing process to plan, draft, and edit their informational texts. During the editing step, students will focus on editing drafts for prepositions and prepositional phrases and using commas in a series and in dates.
- It is recommended that students keep all materials relating to the research element in a folder for easy access.
- The technology applications Texas Essential Knowledge and Skills contain helpful guidance for students who complete the writing piece on a computer.

The following activities may be added to students' writing portfolios to showcase student writing within and across units:

- Organizing information (Activity Page 2.2)
- Creating questions (Activity Page 3.1)
- Planning and conducting research (Activity Page 4.1)
- Final drafts of Aviators Hall of Fame presentations (Activity Page 13.1)
- By this point in the school year, students have learned to form all upper and lowercase letters in cursive. Students are encouraged throughout this knowledge unit to use their cursive skills to complete activity pages. Encourage them to produce their final informational text in cursive by using the cursive they have been practicing in the skills lessons. A template for this project can be found on Activity Book page 13.1. **TEKS 2.2.E**

TEKS 2.2.E Develop handwriting by accurately forming all cursive letters using appropriate strokes when connecting letters.

LESSON

1

FLIGHT AND THE STORY OF AVIATION

Up, Up, and Away!

PRIMARY FOCUS OF LESSON

Speaking and Listening

Students will discuss whether they have ever been on a plane, or on any other flying machine, and how they felt during the flight.

TEKS 2.7.A

Reading

Students will establish purpose for reading.

TEKS 2.6.A

Language

Students will demonstrate understanding of the Tier 3 word *lift*.

TEKS 2.3.B

Writing

Students will develop and answer questions about the pioneers and the science of aviation using a Know-Wonder-Learn (KWL) chart.

TEKS 2.13.A

FORMATIVE ASSESSMENT

Quick Write

Name one of the topics we discussed during the Read-Aloud that you would like to find out more about.

TEKS 2.13.A

TEKS 2.7.A Describe personal connections to a variety of sources; **TEKS 2.6.A** Establish purpose for reading assigned and self-selected texts; **TEKS 2.3.B** Use context within and beyond a sentence to determine the meaning of unfamiliar words; **TEKS 2.13.A** Generate questions for formal and informal inquiry with adult assistance.

LESSON AT A GLANCE

	Grouping	Time	Materials
Introducing the Read-Aloud (10 min.)			
Core Connections	Whole Group	10 min.	❏ Image Cards from *Ancient Greeks: Life, Tradition, and Government* and *Stories of the Ancient Greeks* units
Unit Introduction			
Read-Aloud (25 min.)			
Purpose for Listening	Whole Group	25 min.	❏ world map or globe ❏ Flipbook 1A-1-1A-9
"Wings That Work"			
Comprehension Questions			
Word Work: *Lift*			
Application (25 min.)			
Know-Wonder-Learn (KWL) Chart	Whole Group/ Small Group	25 min.	❏ Activity Page 1.1 ❏ KWL Chart (Digital Components)

ADVANCE PREPARATION

Reading

- Display a world map or a globe.

Writing

- Prepare to distribute copies of the Quick Write to students.
- Prepare and display the following chart (Digital Components).

Know	Wonder	Learn

Universal Access

Reading

- Project Image Cards from *Ancient Greeks: Life, Tradition, and Government* and *Stories of the Ancient Greeks* units to review previously learned information.
- Have students discuss pictures of aviators and aircraft mentioned in the Read-Aloud to build knowledge and make connections.
- Create and post question word signs, such as "Who," "What," "Where," etc., for students to reference throughout the unit. Students will refer to these question words as they formulate questions throughout the unit.
- Provide the following sentence frames for emergent bilingual students to assist them in developing research topics/questions:

  "Some of the aviators I wonder about are _____."

  "For an airplane to fly it needs _____ and _____."

CORE VOCABULARY

aircraft, n. a vehicle (such as an airplane or a helicopter) that can travel through the air and that is supported either by its own lightness or by the action of the air against its surfaces
Example: The Air and Space Museum is filled with all types of aircraft.
Variation(s): none

aviation, n. 1: the flying of aircraft; 2: the designing and making of aircraft
Example: My dad has always had an interest in the history of aviation.
Variation(s): none

blades, n. things that are flat and wide like the part of a leaf or oar
Example: The propeller was made up of eight blades.
Variation(s): blade

curve, n. something having a somewhat round shape
Example: The puzzle piece has a curve that helps it fit securely into the other puzzle piece.
Variation(s): curves

determine, v. to control, to be the cause of or reason for
Example: The behavior of the class will determine if they receive an extra recess.
Variation(s): none

glider, n. an aircraft similar to an airplane but without an engine
Example: My grandpa and I made a glider from a kit we bought at the store.
Variation(s): gliders

ingredients, n. different things that are added together in a specific formula to make something
Example: The chocolate cake recipe had twenty different ingredients!
Variation(s): ingredient

legend, n. a story that is believed by many people but not proven to be true
Example: I don't believe the legends I heard about the old house at the end of my street.
Variation(s): legends

lift, n. a force that pushes upward
Example: The inventors were interested in how lift can help an airplane fly.
Variation(s): none

myth, n. a story that was told in ancient cultures to explain a natural occurrence, practice, or belief
Example: The Greeks created myths to explain the seasons.
Variation(s): myths

observed, v. watched something carefully, noticed
Example: The team observed the playback footage of their loss for changes they could make.
Variation(s): observe

recipe, n. a list of instructions for making a certain type of food
Example: I followed the recipe instructions carefully, but my cake was a disaster.
Variation(s): recipes

technology, n. the machines and tools people use to solve problems
Example: The use of technology in today's world is widespread.
Variation(s): none

Vocabulary Chart for "Wings That Work"

Vocabulary Type	**Tier 3** **Unit-Specific Words**	**Tier 2** **General Academic Words**	**Tier 1** **Everyday Speech Words**
Vocabulary	aircraft curve (*curva*)	ingredients (*ingredientes*) legend myth observed (*observado/a*) recipe technology (*tecnología*)	
Multiple-Meaning Vocabulary Words	glider **lift** blades determine (*determinar*) aviation (*aviación*)		
Sayings and Phrases			

Lesson 1: Up, Up, and Away!

Introducing the Read-Aloud

10M

Speaking and Listening: Students will discuss whether they have ever been on a plane, or on any other flying machine, and how they felt during the flight.

TEKS 2.7.A

CORE CONNECTIONS (5 MIN.)

- Review the following past units: *Ancient Greeks: Life, Tradition, and Government* and *Stories of the Ancient Greeks*.
- Tell students that the class will be starting a new unit about the dream of flying.
- Tell students that people have been interested in flight for as long as they have been around, including civilizations from thousands of years ago like the ancient Greek civilizations.
- Explain that people have always wanted to explore new frontiers. Tell them that just like the pioneers who dreamed about exploring the West, they will learn about the pioneers of aviation and their dream of exploring the sky.
- Introduce the word *aviation*. Explain that *aviation* can have many meanings, but in this unit they will learn about how it relates to the flying of aircraft or flying machines and the designing and making of aircraft.

UNIT INTRODUCTION (5 MIN.)

- Explain to students that good readers ask and answer questions while they are reading. Tell them that a fancy word for questioning is *inquiry*. A good way to organize this information is on a KWL chart.
- Project the KWL chart (Digital Components).

KWL Chart

- Have students turn to Activity Page 1.1.
- Ask students what they already know about airplanes.

Activity Page 1.1

TEKS 2.7.A Describe personal connections to a variety of sources.

- Record this information in the "Know" column on the class copy and have students record what they know on their copies of the chart.
- Ask students to preview the illustrations embedded in the Read-Aloud and to think of questions they have about airplanes.
- Have students record their questions on the chart. Ask for volunteers to share questions they have and record them on the classroom copy.
- Point out to students that, as they read, they should look for answers to these questions and add new questions to their charts.

Lesson 1: Up, Up, and Away!

Read-Aloud

25M

Reading: Students will establish purpose for reading.
TEKS 2.6.A

Language: Students will demonstrate understanding of the Tier 3 word *lift*.
TEKS 2.3.B

PURPOSE FOR LISTENING

- Tell students to listen carefully to identify some of the aviators, flying machines, and events that they will hear about in this unit.

"WINGS THAT WORK" (15 MIN.)

- Read aloud "Wings That Work." As you read, incorporate the following information and guided reading supports:

Show Image 1A-1: Dreaming of flight
Have you ever wished you could fly? Think about all the things you could do. You could visit the birds roosting in the top of a tree. You could say hello to the window washer on the side of a skyscraper or fly over the town water tower. You could see whole towns stretched out below you, just like looking at a map. *If you had the power to fly, what is the first thing you would do?*

TEKS 2.6.A Establish purpose for reading assigned and self-selected texts; **TEKS 2.3.B** Use context within and beyond a sentence to determine the meaning of unfamiliar words.

Show Image 1A-2: Wings made of wax

People have dreamed of flight for as long as we have been around. Many **myths** and **legends**, or imaginary stories people tell about the past, feature people who learn to fly. In Greece, there was the story of Daedalus [/day*dah*luss/]. Daedalus was an inventor who created a set of wings to escape from a wicked king who had trapped him in a tower. Daedalus created two sets of wings made of wax, one for himself and one for his son Icarus [/ih*cah*russ/]. Daedalus escaped, but Icarus was not so lucky. He flew too high, and the heat of the sun melted his wings. Even in ancient times, people knew flying was not easy.

Show Image 1A-3: All in the curve

The myth of Daedalus shows us that people knew birds' wings had something to do with flying. What they may not have known is why. Birds fly because of something called **lift**. A wing is shaped like a **curve**. *The word* lift *means a force that pushes something upward; a curve is something that has a somewhat round shape.* Lift happens when air moves quickly over the curve of a bird's wing, which causes the air beneath the wing to push upward. It is easy for birds, because they are born with wings.

Show Image 1A-4: A Recipe for flying

But it is not so easy for humans to create lift. To understand how to create it, imagine that you are a cook, and you want to make cookies. You would need **ingredients**, *or things that are added together to make something else.* (In this case, butter, flour, eggs, and of course chocolate chips.) And you would need a **recipe**, *or a list of instructions for making food.* (In this case, mix them all together, shape them into cookies, put them in the hot oven for about ten minutes, and presto—cookies!) If you have both ingredients and a recipe, you can make something. *Do you think that is just true for cooking or for everything?* Exactly, it is not just true for cooking, but for everything we can make. *Have you ever used a recipe to make something yummy to eat?*

Lift has a recipe too! And it has two ingredients. One is a wing with the right shape and size. The shape and size of a wing **determines**, *or controls,* the amount of lift you can create from it. (It is just the same as how the amount of flour you have determines how many cookies you can make: if you just have one cup of flour, you cannot make as many cookies as you could if you had a whole pound of flour.) If the top of a wing has more curve than the bottom of the wing, you can get lift. The larger the difference, the more lift you can get. That is one ingredient. Can you guess the other ingredient? Here is a hint: have you ever been out on a windy day with an umbrella and seen the wind blow the umbrella up? That happens because the wind moving over the umbrella is fast enough to create a lot of lift under it. And that is the second ingredient of lift! The faster you can make air move over a wing, the more lift you create.

So those are the two basic ingredients of lift. You need a properly curved wing, and you need a way to move air over it quickly. Anyone who knew the myth of Daedalus and watched birds flying understood a little bit of this. But the trick was to find the right recipe to turn those two ingredients into wings that worked. And no one understood that for a long time.

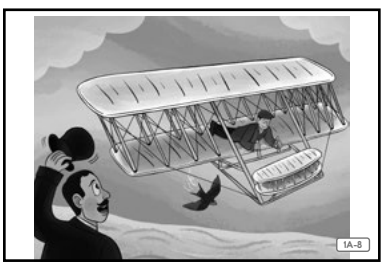
Show Image 1A-5: Bamboo-copters
One of the first working wings appeared in China around the year 320 AD—over 1,700 years ago. And surprisingly, it was a toy! Here is a bamboo helicopter, or a bamboo-copter. It has two long blades attached to a stick. When you twirl the stick of a bamboo-copter, it moves air over the **blades**. Take a look at the shape of the blades. *What do you notice about them?* It is the same shape as a bird's wing! By twirling a bamboo-copter, you are moving air over the blades, and you are creating lift. It is not a huge amount of lift—just as much as your hands can create. But the bamboo-copter is small, so it does not need much lift to send it soaring. It is literally child's play.

Show Image 1A-6: The age of balloons
But a bamboo-copter was not strong enough to carry a person up into the air. Instead, people tried other experiments. Maybe, they reasoned, there was a way to fly without using wings at all.

This man, Joseph Montgolfier [/mont*GOLF*ee*air/], was an inventor who lived in France in the 1700s, about three hundred years after Leonardo da Vinci. One day, while he was watching sparks and smoke drifting up a fireplace, he **observed**, *or noticed,* that the sparks closest to the fire were blowing upward from hot air. If the heat was making the sparks pull themselves into the air, was there a way to pull other things into the air too? Joseph kept trying his ideas in bigger and bigger ways, carefully experimenting, until he and his brother hit on the idea of shaping sheets into a cloth balloon and heating the air beneath it. They tested their theory by building a massive cloth balloon. When they lit the burner to heat the air, though, the balloon flew away without them! As they watched it slowly disappear in the distance, the brothers knew they were onto something. The brothers attached baskets strong enough to carry people to the bottom of their balloons, and more and more people were flying every day. Soon, hot-air balloons filled the skies above France.

Show Image 1A-7: Is lift enough?

But balloons could only take you so high and so far. Because of this, many serious inventors kept trying to find wings that worked. As they continued working on the problem for years—in the end, over a hundred years after the Montgolfiers—**technology**, *or the kinds of machines and tools people have to help solve problems,* kept getting better. *Do you remember the recipe for lift?* Faster air and properly curved wings! As technology got better, people slowly realized that they could probably make vehicles for flying, or **aircraft**, that would go fast enough and be strong enough to fly. Inventors started building flying machines that could go very high and very fast. But they ran into a problem. *Can you guess what it was?* Think back to Montgolfier's hot-air balloon and to the bamboo-copter. Both of them could fly, but both of them flew away. That was fine when someone wasn't riding in them. But people were starting to realize that the problem wasn't just creating lift. You also had to be able to steer.

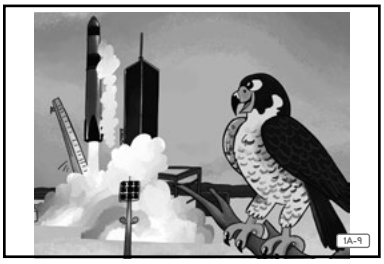


Show Image 1A-8: The Wright answer at last

Here are two brothers, Orville and Wilbur Wright. They ran a bicycle shop in a place called Kitty Hawk, in North Carolina, in the early 1900s. The Wrights believed that they could make wings

that worked. But they also thought that other inventors were looking in the wrong place. Lots of inventors thought that if they could just build an engine that was powerful enough, they could make an aircraft go fast enough to remain stable in the sky. But the Wright brothers decided not to worry about speed. Their aircraft would use no motor at all, only wind. Just like a bird!

The Wright brothers kept studying birds, and they kept studying bicycles. *Who knows how to make a turn on a bicycle? You turn the handlebars, but do you do anything else?* Exactly: you lean into the turn. By leaning into the turn, you help the bike stay balanced. Orville and Wilbur noticed that birds were leaning when they wanted to turn in the air. The Wright brothers started to experiment with that idea. Soon they had built a **glider**, *or a kind of aircraft that flies without an engine,* that had flexible wings. That let the Wright brothers use instruments to carefully control how much lift was on each wing. If a pilot turned the controls to move the left wing so that it had more lift than the right wing, it would start to tilt the airplane upward to the left, which would make the airplane turn. That meant that, even without an engine, a pilot had control over an airplane. Airplanes today still use controls based on the Wright brothers' designs.



Show Image 1A-9: Higher and higher

We have learned a lot from birds, and people use aircraft to fly all over the world. Jet engines let us fly farther and faster than ever across oceans, over mountains, and far above the clouds. With rockets, we can even fly into space! But we are still dreaming of flying higher. People are still asking just how far and how high we can go. It is the same question the Wright brothers asked, and the Montgolfiers, and the children playing with bamboo-copters, and the unknown author of the myth of Daedalus. All of us still dream of wings that work.

COMPREHENSION QUESTIONS (5 MIN.)

1. **Inferential.** Why do you think people have always been interested in flying? *(Answers may vary.)*
2. **Literal.** Why did Daedelus want to fly? *(He wanted to create wings so he could escape from a tower.)*
3. **Literal.** Why are birds able to fly? *(They have wings, and, as air moves quickly over the bird's wings, it causes lift.)*
4. **Literal.** What is the recipe for lift? *(a curved wing and a way to move air quickly over a wing)*
5. **Evaluative.** Think-Pair-Share: How have airplanes changed over time? *(Answers may vary.)*

Challenge

After briefly reviewing the information about *lift* in the text, ask students to make an illustration of how *lift* works.

Support

Have students refer to the illustrations in the Read-Aloud to explain how airplanes have changed over time.

WORD WORK: LIFT (5 MIN.)

1. In the Read-Aloud you heard the sentence, "Birds fly because of something called lift."
2. Say the word *lift* with me.
3. *Lift* in this sentence means a force that pushes upward.
4. Lift is the force that holds an airplane in the air.
5. Can you think of other things that use lift to fly?
6. What is the word we have been talking about?

Use a Word to World activity for follow-up. Ask students to discuss how lift helps a paper airplane to fly. If feasible, have students construct paper airplanes and take turns flying them in a controlled setting. Ask them to observe and think about the factors that make some of the airplanes fly farther, faster, or higher than others. Ask for volunteers to share their thoughts.

Challenge

Ask students to change the design of their paper airplanes to see how the modifications affect *lift*.

Support

Ask students yes/no questions about the text to check for understanding.

Challenge

Have students write down what they specifically wonder about the core vocabulary. For example, "I wonder about how lift works to make an airplane stay in the air."

Support

Students may draw or sketch one topic for the "Wonder" column.

Activity Page 1.1

Lesson 1: Up, Up, and Away!

Application

25M

Writing: Students will develop and answer questions about the pioneers and the science of aviation using a Know-Wonder-Learn (KWL) chart.

TEKS 2.13.A

KWL CHART (25 MIN.)

- Have students refer to the KWL chart. Ask them to review the questions they recorded on Activity Page 1.1 prior to listening to the Read-Aloud.
- Have students think about any questions that were answered during the reading of the text and record this information in the "Learn" section of the chart.
- Ask students to share other information they learned with the class. Record this information on the class copy if it answers any questions that were raised before the Read-Aloud.
- Have students record any new questions that were raised during the reading of the text.
- Explain that good readers create new questions as they are reading to better understand what they read and stay engaged with the text.
- Introduce the word *research* to students.
- Tell students that 'to research' means to learn new information about a topic. Write the word and the definition on the board or chart paper.
- Tell students that they are going to create more questions and research the answers about aviators and aviation. Remind students that aviators are the drivers or pilots of aircraft or flying machines.
- Tell students that research means finding answers to questions in order to learn more about something.
- Draw a line on the KWL chart. Ask students to brainstorm what else they already know about aviators and aviation. Write their responses on the board or chart paper.

TEKS 2.13.A Generate questions for formal and informal inquiry with adult assistance.

- Ask students to suggest topics they want to learn more about in the unit, including historical figures they heard about in the Read-Aloud, the how and why of flight, types of aircraft or flying machines, etc. Record this information on the "Wonder" column of the chart. Students will use these ideas and topics to generate questions for research later on in the unit.

Check for Understanding

What does *research* mean? *(to learn new information about a topic; to find answers to questions)*

Quick Write

Create a question about one of the topics we discussed during the Read-Aloud that you would like to find out more about. **TEKS 2.13.A**

End Lesson

EMERGENT BILINGUAL STUDENTS

Application

Beginning
After reviewing their KWL chart with a partner, students will develop research questions.

Intermediate
Provide sentence frames for developing research questions/topics (e.g., "Some of the aviators I wonder about are ___." or "For an airplane to fly, it needs ___ and ___.").

Advanced/Advanced High
Encourage students to use the question word signs that are posted around the classroom to develop research questions.

ELPS 1.A; ELPS 2.C; ELPS 5.F

TEKS 2.13.A Generate questions for formal and informal inquiry with adult assistance.

LESSON

2

FLIGHT AND THE STORY OF AVIATION

Lighter than Air

PRIMARY FOCUS OF LESSON

Reading

Students will establish purpose for reading text.

TEKS 2.6.A

Language

Students will demonstrate understanding of the Tier 3 word *innovations*.

TEKS 2.3.B

Writing

Students will generate questions about aviation and the historical figures in the unit using question starters.

TEKS 2.13.A

FORMATIVE ASSESSMENT

Quick Write

How was the invention of the hot-air balloon an innovation in aviation?

TEKS 2.3.B

Activity Page 2.2

What else do you wonder about hot-air balloons?

TEKS 2.13.A

TEKS 2.6.A Establish purpose for reading assigned and self-selected texts; **TEKS 2.3.B** Use context within and beyond a sentence to determine the meaning of unfamiliar words; **TEKS 2.13.A** Generate questions for formal and informal inquiry with adult assistance.

LESSON AT A GLANCE

	Grouping	Time	Materials
Introducing the Read-Aloud (10 min.)			
What Have We Already Learned?	Whole Group	10 min.	❏ world map ❏ Activity Page 1.1
Essential Background Information			
Read-Aloud (25 min.)			
Purpose for Listening	Whole Group	25 min.	❏ Aviation Timeline (Digital Components) ❏ *Up and Away!: How Two Brothers Invented the Hot-Air Balloon* by Jason Henry
Up and Away!: How Two Brothers Invented the Hot-Air Balloon			
Comprehension Questions			
Word Work: *Innovations*			
Application (25 min.)			
Generating Research Questions	Whole Group/ Partner	25 min.	❏ Activity Pages 2.1, 2.2

ADVANCE PREPARATION

Introducing the Read-Aloud

- Prepare to display the Aviation timeline (Digital Components).

Aviation Timeline

1783	December 17, 1903	November 1906	July 25, 1909	1921-1926	1927	1937	May 13, 1940	1941–1945	1964
The Montgolfier Brothers	The Wright Brothers	Alberto Santos-Dumont	Louis Blériot	Bessie Coleman	Charles Lindbergh	Amelia Earhart	Igor Sikorsky	Beatrice Shilling The Tuskegee Airmen	Jerrie Mock and Joan Merriam Smith

Reading

- Prepare to read aloud the trade book *Up and Away!: How Two Brothers Invented the Hot-Air Balloon* by Jason Henry. As you preview the book, you may wish to add page numbers and reference the guided reading supports included in this lesson. This trade book does not have numbered pages, but for ease of use we have referred to page numbers in our materials. We begin with page 1, which has an illustration of Joseph Montgolfier, and number each page in order after that.

Application

- Prepare to reference Activity Pages 2.1 and 2.2.
- Prepare to group students in pairs for the Application activity.

Universal Access

- Have a large world map displayed. Point to some of the places where the earliest flying machines were invented and tested; for example, France and Kitty Hawk, North Carolina.
- Bring in pictures of different types of flying machines, such as a hot-air balloon, the Wright brothers' glider, early war planes, etc. Be prepared to tell students a few things about each flying machine.

CORE VOCABULARY

astonishing, adj. causing a feeling of great surprise or wonder
Example: The truck can hold an astonishing amount of stuff.
Variation(s): astonish, astonished, astonishingly

hydrogen, n. a colorless, odorless, and tasteless flammable gas that is the lightest of the chemical elements
Example: The car runs on hydrogen gas.
Variation(s): none

innovations, n. new ideas, methods, or devices
Example: The company's latest innovation is a talking car.
Variation(s): innovation

technical, adj. having special knowledge, especially of a mechanical or scientific subject
Example: He was a technical expert in the field of computer science.
Variation(s): none

tethered, adj. tied up to another object with a type of line, such as a rope
Example: The boat was tethered to the dock with a rope.
Variation(s): tether

Vocabulary Chart for *Up and Away!: How Two Brothers Invented the Hot-Air Balloon*

Vocabulary Type	**Tier 3 Unit-Specific Words**	**Tier 2 General Academic Words**	**Tier 1 Everyday Speech Words**
Vocabulary	hydrogen (*hidrógeno*) **innovations** *(innovaciones)* tethered	astonishing technical (*tenico/a*)	
Multiple-Meaning Vocabulary Words			
Sayings and Phrases			

Lesson 2: Lighter than Air

Introducing the Read-Aloud

10M

Reading: Students will establish purpose for reading text.

TEKS 2.6.A

Activity Page 1.1

WHAT HAVE WE ALREADY LEARNED? (5 MIN.)

- Direct students' attention to Activity Page 1.1. Remind them that the new unit they are studying is about aviation. Ask students to define *aviation* in their own words.
- Ask students to name some of the types of aviation and some of the earliest flying machines that they heard about in yesterday's Read-Aloud.

ESSENTIAL BACKGROUND INFORMATION (5 MIN.)

- Tell students that today they are going to hear a story about two brothers named Joseph and Étienne Montgolfier. They will find out how these brothers discovered that hydrogen is lighter than air and how they used this information to figure out how to fly. Tell students that hydrogen is a type of gas, like oxygen, that they may have learned about in science class.
- Explain that the setting of the story is a country named France. Locate France on a map.
- Tell students that, while you read, they should try to remember who the main characters are and how they achieve their goal.

TEKS 2.6.A Establish purpose for reading assigned and self-selected texts.

Lesson 2: Lighter than Air

Read-Aloud

25M

Reading: Students will establish purpose for reading text.
TEKS 2.6.A

Language: Students will demonstrate understanding of the Tier 3 word *innovations*.
TEKS 2.3.B

PURPOSE FOR LISTENING

- Introduce and model how to ask and answer questions while reading a text. Mention that we ask who, what, when, where, why, and how questions as we read. Show students the cover of the Read-Aloud and say, "I wonder why there are animals in the basket of a hot-air balloon. Do you think we will find out if we keep reading?"

UP AND AWAY!: HOW TWO BROTHERS INVENTED THE HOT-AIR BALLOON (10 MIN.)

- Read aloud *Up and Away!: How Two Brothers Invented the Hot-Air Balloon* by Jason Henry. As you read, incorporate the following information and guided reading supports:
  - Continue modeling the concept of asking and answering questions. Pause on page 2 and say, "I wonder what Joseph will invent. We have to keep reading to find out."
  - On page 4, explain that *technical* describes the skills, methods, and processes used to achieve goals.
  - Tell students that innovations are new ideas, new devices, or the introduction of something new. When the hot-air balloon was first introduced, it was a great innovation.
  - Pause on page 5 and ask, "What do you think Joseph is thinking when he sees the papers floating in the air?" Invite two or three students to share their responses with the class.
  - Pause on page 6 and explain that hydrogen is a gas. Oxygen is also a gas. We breathe oxygen. Gases are colorless and odorless and are found in the air all around us. Hydrogen is the lightest gas.
  - Make a prediction. Ask students, "What do you think will happen next now

TEKS 2.6.A Establish purpose for reading assigned and self-selected texts; **TEKS 2.3.B** Use context within and beyond a sentence to determine the meaning of unfamiliar words.

that Joseph made a discovery about the paper floating into the air above the fire?"

- Pause on page 7 and explain that something that is *astonishing* is something that causes a feeling of great surprise or wonder.
- Pause on page 15 and explain that *tethered* means something is tied up so it will not get away.
- After reading, discuss with students how the pictures help the reader imagine what it must have been like to see one of the very first flying machines.
- **Think-Pair-Share:** Ask, "How would you feel if you were the first human to ride in a hot-air balloon? Would you be scared or excited?"
- After reading, ask students where the Montgolfier brothers are on the Aviation Timeline. *(1783)*

COMPREHENSION QUESTIONS (10 MIN.)

1. **Literal.** Who were the main characters in the story? *(Joseph and Étienne Montgolfier)*
2. **Literal.** What is the first discovery that Joseph makes that leads him to invent the hot-air balloon? *(a gas that is lighter than air that provides lift)*
3. **Evaluative.** Is this story fiction or nonfiction? How do you know? *(Nonfiction. Answers may vary but may include that it is about historical events and figures.)*
4. **Inferential.** Explain how the brothers' determination helped them achieve their goal. *(Answers may vary but should include that, even though they experienced setbacks, they never gave up and eventually achieved their goal of flying.)*
5. **Inferential.** Think-Pair-Share: How do you think the Montgolfiers' invention inspired other inventors to build more flying machines? *(They saw that with determination they could achieve their goals too. Explain the meaning of determination.)*

WORD WORK: INNOVATIONS (5 MIN.)

1. In the Read-Aloud you heard the sentence,"... the brothers shared a common interest in science and the latest technical innovations of the day."
2. *Innovations* are new ideas, devices, or the introduction of something new. When the hot-air balloon was first introduced, it was a great innovation.
3. Scientists are responsible for many *innovations* in computer science.
4. Can you think of any new innovations in the world today?

Use a Turn and Talk activity for follow-up. Say: "I am going to name some innovations":

- automobile
- telephone
- automatic washing machine

Turn to a partner and brainstorm other innovations.

Challenge

As students brainstorm other innovations, have students rank them in order from least to most innovative. Have students share their rankings and explain their reasoning.

Support

Ask students to draw a picture of one of the innovations they brainstormed.

Lesson 2: Lighter than Air

Application

25M

Writing: Students will generate questions about aviation and the historical figures in the unit using question starters.

TEKS 2.13.A

GENERATING RESEARCH QUESTIONS (25 MIN.)

- Tell students that they will be using question words on Activity Page 2.1 to answer questions about the aviators and their invention of the hot-air balloon from today's Read-Aloud.
- Tell students that they will practice asking questions (inquiry) and looking for answers (researching) to use in their culminating task.
- Ask students to turn to Activity Page 2.1.
- Review the activity instructions with students and answer any questions that they may have. Have students complete the activity page with a partner.

Challenge

Have students generate one or more questions. Then, use the text to answer those questions.

Support

Allow students to work in pairs to complete Activity Page 2.1.

Activity Page 2.1

TEKS 2.13.A Generate questions for formal and informal inquiry with adult assistance.

EMERGENT BILINGUAL STUDENTS

Application

Beginning
Have students draw and talk to a partner to discuss what they learned in the first lesson about aviation. Have students sketch or draw images to ask questions about hot-air balloons.

Intermediate
Have students talk to a partner to discuss what they learned in the first lesson about aviation. Have students develop one question with teacher assistance, using question starters (e.g., "Who?", "What?", "Where?", "When?").

Advanced/Advanced High
Have students talk to a partner to discuss several details they learned in the first lesson about aviation. Have students develop more than one question and read the questions aloud to a partner or teacher.

ELPS 1.A; ELPS 2.C; ELPS 5.F

Activity Page 2.2

- After students have completed the activity, have them participate in a **Turn and Talk** as a wrap-up for the lesson. Say, "Turn to your partner and explain how you found your answers. Have your partner ask you one question about what you drew or wrote, and answer that question. Then, have your partner share their answers. Ask a question about their drawing or writing, and have your partner answer that question."

Check for Understanding

Have several students share with the class the questions created during the activity and the answers given.

Quick Write

- How was the invention of the hot-air balloon an innovation in aviation? **TEKS 2.3.B**
- Writing: Activity Page 2.2: What else do you wonder about hot-air balloons? **TEKS 2.13.A**
- Have students complete Activity Page 2.2 with the name of the aviator and any questions they have about hot-air balloons that were not answered during the Application activity.
- Activity Page 2.2 will be used as a way for students to track and organize information from the Read-Alouds during the unit. This graphic organizer will then be used when creating their culminating task.

End Lesson

TEKS 2.3.B Use context within and beyond a sentence to determine the meaning of unfamiliar words; **TEKS 2.13.A** Generate questions for formal and informal inquiry with adult assistance.

LESSON

3

FLIGHT AND THE STORY OF AVIATION

The Amazing Flying Machine

PRIMARY FOCUS OF LESSON

Reading

Students will make inferences about the impact of the Wright brothers' first flight on aviation.

TEKS 2.6.F

Language

Students will demonstrate understanding of the Tier 2 word *designing*.

TEKS 2.3.B

Writing

Students will generate questions and look for answers about aviation and the historical figures in the unit using question starters.

TEKS 2.13.A

FORMATIVE ASSESSMENT

Quick Write — Describe the design of the Wright brothers' flying machine.

TEKS 2.3.B

Activity Page 2.2 — What else do you wonder about the Wright brothers?

TEKS 2.13.A

TEKS 2.6.F Make inferences and use evidence to support understanding; **TEKS 2.3.B** Use context within and beyond a sentence to determine the meaning of unfamiliar words; **TEKS 2.13.A** Generate questions for formal and informal inquiry with adult assistance.

LESSON AT A GLANCE

	Grouping	Time	Materials
Introducing the Read-Aloud (10 min.)			
What Have We Already Learned?	Whole Group	10 min.	❏ world map
Essential Background Information			
Read-Aloud (25 min.)			
Purpose for Listening	Whole Group	25 min.	❏ Aviation Timeline (Digital Components) ❏ Who, What, When, Where, Why, and How (Digital Components) ❏ Activity Page 3.1 ❏ Image Card 1
"The Amazing Flying Machine"			
Comprehension Questions			
Word Work: *Designing*			
Application (25 min.)			
Who, What, Where, When, Why, How	Whole Group/ Partner	25 min.	❏ Activity Pages 2.2, 3.1

ADVANCE PREPARATION

Introducing the Read-Aloud

- Prepare to display the Aviation Timeline (Digital Components).

Aviation Timeline

The Montgolfier Brothers	The Wright Brothers	Alberto Santos-Dumont	Louis Blériot	Bessie Coleman	Charles Lindbergh	Amelia Earhart	Igor Sikorsky	Beatrice Shilling The Tuskegee Airmen	Jerrie Mock and Joan Merriam Smith
1783	**December 17, 1903**	**November 1906**	**July 25, 1909**	**1921-1926**	**1927**	**1937**	**May 13, 1940**	**1941–1945**	**1964**

- Prepare to display Image Card 1.

Reading

- Prepare to display Activity Page 3.1.
- Prepare to read aloud the ReadWorks passage "The Amazing Flying Machine." As you preview the article, consider referencing the guided reading supports included in this lesson.

Application

- Prepare to reference Activity Page 3.1.
- Plan to group students in pairs for the Application activity.

Universal Access

- Gather photos of Charles Lindbergh and the *Spirit of St. Louis*, Chuck Yeager and the *Glamorous Glennis*, and John Glenn in the *Mercury Friendship 7* space capsule for students to refer to during the Read-Aloud.
- Gather images of the Wright brothers' designs to share with the class.

CORE VOCABULARY

designing, v. drawing or making plans that show how something will look or how it will be made
Example: My brother is designing a plan to build a tree house.
Variation(s): design, designed

exhibit, n. something that is put on display
Example: The artist's work is on exhibit at the museum.
Variation(s): exhibits

invention, n. an original device or process
Example: The light bulb was one of the most important inventions of the nineteenth century.
Variation(s): inventions

powered, v. supplied with a form of energy
Example: The factory is powered by solar energy.
Variation(s): none

orbit, v. to move in a path around another object
Example: The moon orbits the earth every twenty-four hours.
Variation(s): orbits

pitch, v. to move in such a way that one end falls while the other end rises
Example: The ship pitched in a rough sea.
Variation(s): pitched

roll, v. to swing from side to side
Example: The ship rolled in the giant waves.
Variation(s): rolled

yaw, v. to turn suddenly from a straight course
Example: The boat yawed in the heavy seas.
Variation(s): yawed

Vocabulary Chart for "The Amazing Flying Machine"

Vocabulary Type	**Tier 3** **Unit-Specific Words**	**Tier 2** **General Academic Words**	**Tier 1** **Everyday Speech Words**
Vocabulary	invention (*invención*) roll yaw	**designing** exhibit orbit (*órbita*)	
Multiple-Meaning Vocabulary Words	pitch	powered	
Sayings and Phrases			

Lesson 3: The Amazing Flying Machine

Introducing the Read-Aloud

10M

Reading: Students will make inferences about the impact of the Wright brothers' first flight on aviation.

TEKS 2.6.F

WHAT HAVE WE ALREADY LEARNED? (5 MIN.)

- Review the Aviation Timeline to discuss what was learned in the previous lesson's Read-Aloud.
- Ask, "What is the topic of the unit that we are learning about?" *(aviation)*
- Ask, "What is a characteristic, or trait, that the Montgolfier brothers had?" *(Guide students to the word* determination*.)* Ask students how the Montgolfiers' determination helped them achieve their goal of flying.
- Ask two or three students to share their responses.

ESSENTIAL BACKGROUND INFORMATION (5 MIN.)

- Say, "Today we are going to hear a story about two determined aviators from the United States (Dayton, Ohio) and their amazing flying machine." Mark the place on the map.

TEKS 2.6.F Make inferences and use evidence to support understanding.

Lesson 3: The Amazing Flying Machine

Read-Aloud

25M

Reading: Students will make inferences about the impact of the Wright brothers' first flight on aviation.

TEKS 2.6.F

Language: Students will demonstrate understanding of the Tier 2 word *designing*.

TEKS 2.3.B

PURPOSE FOR LISTENING

- As you read the story, ask students to listen for how the Wright brothers' flying machine is different from the hot-air balloon and how it will have an impact on future flying machines.

"THE AMAZING FLYING MACHINE" (10 MIN.)

Activity Page 3.1

- Have students turn to Activity Page 3.1. Explain to students that they will use the text to formulate questions using question words.
- Read aloud the ReadWorks passage "The Amazing Flying Machine." As you read, incorporate the following information and guided reading supports:
  - Model the concept of asking and answering questions. Direct students' attention to the photograph in the passage and ask, "What do you think the two men are doing in the picture? What is the machine they are on?" Write these questions in the "What" section on the class copy of Activity Page 3.1 and instruct students to do the same.
  - Pause after the first paragraph and explain that something that is *powered* is something that is supplied with an energy source, like a car or a speed boat.
  - Show Image Card 1 to help students understand what the Wright Flyer looked like.
  - Ask students, "How is the Wright brothers' flying machine different from the Montgolfier brothers' hot-air balloon?" Write this question in the "How" section on the class copy of Activity Page 3.1 and instruct students to do the same.

Image Card 1

TEKS 2.6.F Make inferences and use evidence to support understanding; **TEKS 2.3.B** Use context within and beyond a sentence to determine the meaning of unfamiliar words.

- Continue reading to the end of the section and explain that when something is on exhibit, it means it is on display. Museums are places where people go to see exhibits.
- Stop after reading the second section and explain that, when you design something, you draw or make plans to show how something will work. Tell students that an *invention* is something that is made that has never been made before. The Wright brothers invented a type of powered airplane. Remind students that something that is *powered* is something that is supplied with an energy source, like a car or a speed boat. Ask, "Can you name any inventions that have made our lives easier? Have you ever thought of designing an invention?"
- Continue reading to the end of the article.
- Ask students to write or draw answers to the questions on Activity Page 3.1. Ask two or three students to share their answers.
- **Think-Pair-Share:** Ask, "How is the Wright brothers' flying machine different from the Montgolfier brothers' hot-air balloon?" Ask two or three students to share their responses.
- Ask students where the Wright brothers are on the Aviation Timeline. *(December 17, 1903)*

COMPREHENSION QUESTIONS (10 MIN.)

1. **Literal.** What was the only way to fly before the Wright brothers invented the flying machine? *(hot-air balloon)*
2. **Literal.** Describe the Wright brothers' flying machine. *(It was a powered, glider-type machine that resembled a box kite.)*
3. **Inferential.** Why do you think the Wright brothers' flying machine is displayed at the National Air and Space Museum? *(Answers may vary but should include that is a part of the history of aviation.)*
4. **Inferential.** Why does the author describe Orville's flight as "short but very sweet"? *(He flew for only 59 seconds and went a distance of 852 feet, but it was successful.)*
5. **Evaluative.** Thumbs-Up/Thumbs-Down: The Wright brothers achieved their goal of flying. *(thumbs-up)*
6. **Literal.** Think-Pair-Share: What are some of the ways in which the Wright brothers' discoveries about flying are still being used today? *(Airplanes today are controlled in the same way that the Wright brothers controlled their airplane: roll, pitch, and yaw.)*

WORD WORK: DESIGNING (5 MIN.)

1. In the Read-Aloud you heard the sentence, "Designing and building the flying machine took years."
2. Say *designing* with me.
3. *Designing* means drawing or making plans that show how something will look or how it will be made.
4. Inventors use designs to plan their inventions. Have you ever designed something?
5. What is the word we have been talking about?

Use a Turn and Talk activity for follow-up. Say: "I am going to name some jobs in which people design things":

- architect
- engineer
- cake decorator

Turn to a partner and brainstorm other jobs in which people design things.

Challenge

Ask students to design a new emoji and describe their design.

Support

If students have difficulty coming up with different people that make designs, provide examples of jobs that require designs and ask what the people who do those jobs are called.

Challenge

Challenge students to come up with another title for the Read-Aloud.

Support

Provide question frames for formulating questions.

EMERGENT BILINGUAL STUDENTS

Application

Beginning
Have students sketch or draw images to ask questions about the Wright brothers.

Intermediate
Have students work with their partner to find answers to their partner's questions.

Advanced/Advanced High
Advise students to use key words in the questions as they go back to the Read-Aloud to find the answers. Remind them that key words are the most important words in the question.

ELPS 2.C; ELPS 4.J; ELPS 5.G

Lesson 3: The Amazing Flying Machine

Application

25M

Writing: Students will generate questions and look for answers about aviation and the historical figures in the unit using question starters.

TEKS 2.13.A

WHO, WHAT, WHERE, WHEN, WHY, HOW (25 MIN.)

- Direct students' attention to Activity Page 3.1. Ask students to work with a partner to think of questions that they could ask about the text for each question word. Ask them to record the questions on their graphic organizer.
- After students have generated questions, have them go back to the reading to search for answers.
- **Turn and Talk:** Turn to your partner and share your answers. Have your partner ask you one question about what you wrote, and answer that question. Then, have your partner share their writing. Ask a question about their writing, and have your partner answer that question.

Check for Understanding

Have several students share with the class some of the questions they created and the answers given.

TEKS 2.13.A Generate questions for formal and informal inquiry with adult assistance.

Quick Write

- Writing: Today you learned the word *designing*. Explain what designing means in the following sentence: The Wright brothers used the designing of the flying machine to plan their invention. **TEKS 2.3.B**
- Activity Page 2.2: What else do you wonder about the Wright brothers? **TEKS 2.13.A**
- Have students complete Activity Page 2.2 with the name of the aviators/invention/aircraft from today's lesson. Have them write any questions/topics that were not answered during the Application activity.

End Lesson

Activity Page 2.2

TEKS 2.3.B Use context within and beyond a sentence to determine the meaning of unfamiliar words; **TEKS 2.13.A** Generate questions for formal and informal inquiry with adult assistance.

LESSON

4

FLIGHT AND THE STORY OF AVIATION

The Glorious Flight

PRIMARY FOCUS OF LESSON

Speaking and Listening

Students will share information and ideas that focus on the topic of determination.

TEKS 2.1.C

Reading

Students will generate questions to gain a deeper understanding of the reading.

TEKS 2.1.A

Language

Students will demonstrate understanding of the Tier 2 word *sputters*.

TEKS 2.3.B

Writing

Students will develop a research plan about how the historical figures in this unit had an impact on aviation.

TEKS 2.13.B

FORMATIVE ASSESSMENT

Quick Write	Name at least three research steps you would use to find out more about aviators and aviation. TEKS 2.13.B
Activity Page 2.2	What else do you wonder about Louis Blériot? How can you find the answers? TEKS 2.13.A

TEKS 2.1.C Share information and ideas that focus on the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language; **TEKS 2.1.A** Listen actively, ask relevant questions to clarify information, and answer questions using multi-word responses; **TEKS 2.3.B** Use context within and beyond a sentence to determine the meaning of unfamiliar words; **TEKS 2.13.B** Develop and follow a research plan with adult assistance; **TEKS 2.13.A** Generate questions for formal and informal inquiry with adult assistance.

LESSON AT A GLANCE

	Grouping	Time	Materials
Introducing the Read-Aloud (10 min.)			
What Have We Already Learned?	Whole Group	10 min.	❑ world map or globe
Essential Background Information			
Read-Aloud (25 min.)			
Purpose for Listening	Whole Group	25 min.	❑ Aviation Timeline (Digital Components) ❑ *The Glorious Flight: Across the Channel with Louis Blériot* by Alice and Martin Provensen
The Glorious Flight: Across the Channel with Louis Blériot			
Comprehension Questions			
Word Work: *Sputters*			
Application (25 min.)			
Research Plan	Whole Group/ Partner	25 min.	❑ Activity Pages 2.2, 4.1 ❑ My Research Plan (Digital Components)

ADVANCE PREPARATION

Introducing the Read-Aloud

- Display a world map or a globe.
- Prepare to group students in pairs for Think-Pair-Share.

Read-Aloud

- Prepare to read aloud the trade book *The Glorious Flight: Across the Channel with Louis Blériot* [/Blair*ee*oh/] by Alice and Martin Provensen. As you preview the book, you may wish to reference the guided reading supports included in this lesson.
- Prepare to display the Aviation Timeline (Digital Components).

Aviation Timeline

The Montgolfier Brothers	The Wright Brothers	Alberto Santos-Dumont	Louis Blériot	Bessie Coleman	Charles Lindbergh	Amelia Earhart	Igor Sikorsky	Beatrice Shilling The Tuskegee Airmen	Jerrie Mock and Joan Merriam Smith
1783	**December 17, 1903**	**November 1906**	**July 25, 1909**	**1921-1926**	**1927**	**1937**	**May 13, 1940**	**1941–1945**	**1964**

Application

- Students will need Activity Page 2.2 for review.
- Prepare and display the chart below. The chart can also be accessed in the digital materials for the unit. Display the completed chart throughout the study of the unit.

My Research Plan (Digital Components)

My Research Plan
Step 1: Choose a research topic.
Step 2: Search for information.
Step 3: Organize information.
Step 4: Prepare the final research project.
Step 5: Present and share the final research.

Universal Access

- Display photos of Louis Blériot [/Blair*ee*oh/] and his flying machine.
- Prepare to display a list of Roman numerals I–XI and the corresponding numbers to help students sequence the events in the story.

CORE VOCABULARY

aerostat, n. a lighter-than-air aircraft (such as a balloon or a blimp)
Example: Blimps are a kind of aerostat.
Variation(s): aerostats

cockpit, n. a space in an airplane for the pilot
Example: The cockpit is usually at the front of the airplane.
Variation(s): cockpits

glorious, adj. having or deserving praise or admiration
Example: The orchestra performed a glorious version of "The Four Seasons" by Vivaldi.
Various(s): none

lever, n. a bar or rod used to run or adjust something

Example: In a car with a manual transmission, the driver has to move the gearshift lever to change gears.
Variations(s): levers

propeller, n. a device with two or more blades that turn quickly and cause a ship or aircraft to move
Example: The C-130 Hercules plane has four large propellers.
Variations(s): propellers

sputters, v. to make explosive popping sounds
Example: The motor sputters whenever I step on the gas pedal.
Variation(s): sputter

Vocabulary Chart for *The Glorious Flight: Across the Channel with Louis Blériot*

Vocabulary Type	**Tier 3 Unit-Specific Words**	**Tier 2 General Academic Words**	**Tier 1 Everyday Speech Words**
Vocabulary	aerostat (*aeróstato*) cockpit propeller	glorious (*glorioso/a*) lever **sputters**	
Multiple-Meaning Vocabulary Words			
Sayings and Phrases			

Lesson 4: The Glorious Flight

Introducing the Read-Aloud

10M

Speaking and Listening: Students will share information and ideas that focus on the topic of determination.

TEKS 2.1.C

WHAT HAVE WE ALREADY LEARNED? (5 MIN.)

- Review the Aviation Timeline to revisit what was learned in the previous Read-Aloud.
- Ask, "What does it mean to have determination?" *(the act of overcoming obstacles or challenges to achieve a goal)*
- Ask students to name some people from the previous lessons that have a lot of determination. *(the Montgolfier brothers, the Wright brothers)*
- Ask students why these figures are important in the world of aviation. *(They invented the first flying machines: first a balloon, then a plane.)*
- Ask students to describe the Montgolfier brothers' flying machine. Then ask them to describe the Wright brothers' flying machine.
- **Think-Pair-Share:** Ask, "If you have determination, what kinds of characteristics, or qualities, do you need to have? Can you think of some people you know who have a lot of determination?"

ESSENTIAL BACKGROUND INFORMATION (5 MIN.)

- Tell students that today they are going to meet another aviator from France who had a lot of determination. Mark the country on the map. Ask, "Who else was from France that we have learned about?" *(the Montgolfier brothers)*

TEKS 2.1.C Share information and ideas that focus on the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language.

Lesson 4: The Glorious Flight

Read-Aloud

25M

Reading: Students will generate questions to gain a deeper understanding of the reading.

TEKS 2.1.A

Language: Students will demonstrate understanding of the Tier 2 word *sputters*.

TEKS 2.3.B

PURPOSE FOR LISTENING

- Tell students to listen carefully for the important events that happen during the Read-Aloud.

THE GLORIOUS FLIGHT: ACROSS THE CHANNEL WITH LOUIS BLÉRIOT (15 MIN.)

- Read aloud *The Glorious Flight: Across the Channel with Louis Blériot* by Alice and Martin Provensen. As you read, incorporate the following information and guided reading supports:
  - Pause on page 4 and tell students that the English Channel is a body of water between France and England, which is about 20 miles wide. Point out the English Channel on a map.
  - Pause on page 12 and ask students, "Why do you think some of the words are written in capital letters?" Encourage students to recognize that by making the letters big, the authors help us "hear" the loudness of the airplane. Ask, "Why might an author use capital letters for some words? *(to show feelings such as anger and surprise)*
  - Pause on page 14 and ask, "Why do you think Papa compares his flying machine to 'a great white bird'?"
  - On page 20, explain that a *propeller* is a device with two or more blades that turn quickly and cause a ship or aircraft to move.
  - Pause on page 22 and explain that an aeroplane is the same thing as an airplane.
  - On page 26, tell students that a *cockpit* is the place where pilots sit while they are flying a plane.
  - Pause on page 26 and tell students that the White Cliffs of Dover are cliffs on the coast of England. Point it out on a map.
  - Ask for a volunteer to show the class where Louis Blériot is on the Aviation Timeline. *(July 25, 1909)*

Challenge

Have students create a timeline based on the flying machines of Louis Blériot.

Support

Have students use numbers to help them sequence the events in the story.

TEKS 2.1.A Listen actively, ask relevant questions to clarify information, and answer questions using multi-word responses; **TEKS 2.3.B** Use context within and beyond a sentence to determine the meaning of unfamiliar words.

COMPREHENSION QUESTIONS (5 MIN.)

1. **Inferential.** Why do you think it took Papa so many tries to build a flying machine that worked? How many airplanes did he build? How do you know? *(Answers may vary but should include that he was determined to achieve his goal of flying across the English Channel. He built eleven airplanes, which he named with Roman numerals.)*
2. **Literal.** In what year did Papa attempt to fly across the English Channel? *(1909)*
3. **Inferential.** How do you think Papa felt when he and his airplane landed in England? *(Answers may vary but should include that he probably felt proud for achieving his goal.)*
4. **Inferential.** What do you think kept Papa from getting discouraged? *(Help students recognize his determination, as well as other positive traits.)*
5. **Evaluative.** Think-Pair-Share: What is something you have worked hard at? What helped you to keep on trying even though it was hard? *(Answers may vary.)*
6. **Evaluative.** Write a question that will help you gain deeper understanding of the reading. *(Questions may vary.)*

WORD WORK: SPUTTERS (5 MIN.)

1. In the story, you heard the phrase "The motor coughs. Sputters. Roars. Down the grassy field *Blériot XI* bumps."
2. Say *sputters* with me.
3. When something *sputters*, it makes popping or explosive sounds.
4. The old car sputtered to a stop when the engine stopped running.
5. Tell me something else that might sputter.
6. What is the word we have been talking about?

Use a Making Choices activity for follow-up. Say, "I am going to read a list of several items. If the item I read might be something that could sputter, say, 'That could sputter.' If the item is not something that could sputter, say, 'That could not sputter.'"

- a math book *(That could not sputter.)*
- my grandpa's old truck *(That could sputter.)*
- the fireworks at the Fourth of July party *(That could sputter.)*
- the rocks on the side of the road *(That could not sputter.)*
- my school bus *(That could sputter.)*

Support

Ask students to draw a picture of something that sputters.

Challenge

Ask students to find more definitions of the word *sputter*.

Lesson 4: The Glorious Flight

Application

25M

Writing: Students will develop a research plan about how the historical figures in this unit had an impact on aviation.

TEKS 2.13.B

RESEARCH PLAN (25 MIN.)

- Tell students that they are going to make a research plan using Activity Page 4.1.
- Explain that they need a plan to help them organize their thoughts and the information they collect. They will then use this information to make their presentation for the Aviators Hall of Fame.
- Display the My Research Plan chart (Digital Component). Explain that there are five steps that they will follow when they are trying to find information about something. These are called research steps.
- Ask students to look at the first step on the chart. Explain that this is the beginning of the research process. Inform them that they can use this chart to determine their research topics.

My Research Plan (Digital Components)

My Research Plan
Step 1: Choose a research topic.
Step 2: Search for information.
Step 3: Organize information.
Step 4: Prepare the final research project.
Step 5: Present and share the final research.

Activity Page 4.1

Challenge

Have students create a visual of the steps in the research process, such as a poster or a flow chart.

Support

Have students make drawings next to the steps on their activity page to help them remember how to use each step.

TEKS 2.13.B Develop and follow a research plan with adult assistance.

- Explain to students that in this step they will brainstorm ideas, explore question options, and generate questions about the topic. Write "brainstorm questions" on the chart and have students copy it on their charts.
- Remind students that they have already been creating questions for each lesson on Activity Page 2.2. Tell them that they will use these questions when they start the next step.
- Next, instruct students to look at the second step: search for information. Tell students that there are many different tools they can use to look for answers to their questions. Some of these include identifying key words, finding sources of information (articles, magazines, books, locally approved sources), and taking notes. Write "key words, sources, and notes" on the chart and have students copy it on their charts.
- Move on to the third step and explain that this step is used for organizing information into categories. They can organize information using their notes or graphic organizers. Write these details on the classroom chart in the corresponding box and have students do the same on their charts. Ask students if they can think of any other ways to organize information.
- Explain that the fourth step is for creating or preparing the project. Explain that this is the drafting and revising stage. They can use a rubric to make sure they are including everything they need in the final presentation. They can also use feedback from others to revise their final presentation. Write "drafting and revising" in the corresponding box and have students do the same.
- The last step is for presenting their research. In this step, they rehearse presenting to an audience, practice speaking and listening skills with their classmates, and then present their final research project to an audience. Write "practice and present" on the chart in the corresponding box and have students do the same on their charts.

Check for Understanding

What are the five steps in a research plan?
(*chose a research topic, search for information, organize information, prepare the final research project, present and share the final research*)

Activity Page 2.2

EMERGENT BILINGUAL STUDENTS

Application

Beginning
Provide students with a completed research plan. Have them review it with their teacher.

Intermediate
Provide students with a completed research plan and have them read it to their classmate.

Advanced/Advanced High
After completing the My Research Plan chart, ask students to orally explain the research plan while collaborating with a classmate.

ELPS 3.E; ELPS 4.D; ELPS 5.B

Activity Page 2.2

Quick Write

- Name at least three research steps you would use to find out more about aviators and aviation.
  TEKS 2.13.B

- Writing: Activity Page 2.2: What else do you wonder about Louis Blériot? How can you find the answers?
  TEKS 2.13.A

- Have students complete Activity Page 2.2 with the name of the aviator and any questions/topics they have about Louis Blériot's flying machines. Also have them start to think about ways they could find answers to their questions, such as through the Read-Aloud or other locally approved sources.

End Lesson

TEKS 2.13.B Develop and follow a research plan with adult assistance; **TEKS 2.13.A** Generate questions for formal and informal inquiry with adult assistance.

LESSON

5

FLIGHT AND THE STORY OF AVIATION

The Race Is On

PRIMARY FOCUS OF LESSON

Reading

Students will evaluate key details from the text and use evidence to support understanding.

TEKS 2.6.G

Language

Students will demonstrate understanding of the Tier 3 word *spherical*.

TEKS 2.3.B

Writing

Students will identify resources to find answers to research questions about aviators and their contributions to aviation.

TEKS 2.13.B; TEKS 2.13.C; TEKS 2.13.D

FORMATIVE ASSESSMENT

Quick Write

Use evidence from the text to explain how Alberto Santos-Dumont may have felt when he learned of the Wright brothers and their flying machine.

TEKS 2.6.G

Activity Page 2.2

What else do you wonder about Alberto Santos-Dumont's flying machines?

TEKS 2.13.A

TEKS 2.6.G Evaluate details read to determine key ideas; **TEKS 2.3.B** Use context within and beyond a sentence to determine the meaning of unfamiliar words; **TEKS 2.13.B** Develop and follow a research plan with adult assistance; **TEKS 2.13.C** Identify and gather relevant sources and information to answer questions; **TEKS 2.13.D** Identify primary and secondary sources; **TEKS 2.13.A** Generate questions for formal and informal inquiry with adult assistance.

LESSON AT A GLANCE

	Grouping	Time	Materials
Introducing the Read-Aloud (10 min.)			
What Have We Already Learned?	Whole Group	10 min.	❏ world map or globe
Essential Background Information			
Read-Aloud (25 min.)			
Purpose for Listening	Whole Group	25 min.	❏ Aviation Timeline (Digital Components) ❏ Read-Aloud: "Alberto Santos-Dumont" ❏ Flipbook 5A-1-5A-7
"Alberto Santos-Dumont"			
Comprehension Questions			
Word Work: *Spherical*			
Application (25 min.)			
Researching Answers	Whole Group	25 min.	❏ Activity Pages 2.2, 4.1

ADVANCE PREPARATION

Introducing the Read-Aloud

- Display a world map or a globe.
- Prepare to group students in pairs for Think-Pair-Share.

Read-Aloud

- Prepare to read aloud "Alberto Santos-Dumont."
- Prepare to display the Aviation Timeline (Digital Components).

Aviation Timeline

The Montgolfier Brothers	The Wright Brothers	Alberto Santos-Dumont	Louis Blériot	Bessie Coleman	Charles Lindbergh	Amelia Earhart	Igor Sikorsky	Beatrice Shilling The Tuskegee Airmen	Jerrie Mock and Joan Merriam Smith
1783	**December 17, 1903**	**November 1906**	**July 25, 1909**	**1921-1926**	**1927**	**1937**	**May 13, 1940**	**1941–1945**	**1964**

Application

- Students will need Activity Page 2.2 for review.
- Prepare to have students review Activity Page 4.1.

Universal Access

- Create an anchor chart using the following sentence frame:
  - When _____ happened, it was a key detail, because...

CORE VOCABULARY

confidence, n. a feeling or belief that something can be done well or successfully
Example: One must have a lot of confidence to sing in front of a crowd.
Variation(s): none

descend, v. to move from a higher place or level to a lower one
Example: Firefighters descend a pole to quickly get out of the firehouse.
Variation(s): descend, descends

inflated, v. filled with air or gas
Example: My partner inflated the flat tire.
Variation(s): inflate

spherical, adj. having the shape of a sphere
Example: Oranges are spherical fruits.
Variation(s): none

wealth, n. a plentiful supply of money or valuable possessions
Example: She worked hard, earned a lot, and as a result, had much wealth.
Variation(s): wealthy

Vocabulary Chart for "Alberto Santos-Dumont"

Vocabulary Type	**Tier 3 Unit-Specific Words**	**Tier 2 General Academic Words**	**Tier 1 Everyday Speech Words**
Vocabulary	**spherical (*esférico/a*)**	confidence (*confianza*) wealth descend (*descender*)	
Multiple-Meaning Vocabulary Words	inflated		
Sayings and Phrases			

Lesson 5: The Race Is On

Introducing the Read-Aloud

10M

Reading: Students will evaluate key details from the text and use evidence to support understanding.

TEKS 2.6.G

WHAT HAVE WE ALREADY LEARNED? (5 MIN.)

- Ask students how the aviators they have learned about so far are similar. *(They all have determination.)* Ask students how the aviators are different. *(They have invented different flying machines, and they are from different places.)*
- Ask, "What does it mean to have determination? (*working to overcome obstacles or challenges to achieve a goal)* Can you tell me how Papa (Louis Blériot) used determination to achieve his goal of flying across the English Channel?" *(He continued to try, even when he was unsuccessful, and eventually he was able to achieve his goal.)*

ESSENTIAL BACKGROUND INFORMATION (5 MIN.)

- Say, "Today we are going to read a story about another aviator with a lot of determination. He was from Brazil but lived in Paris, France." Point out Brazil and France on a map.
- Ask, "Who else was from France that we have learned about?"*(the Montgolfier brothers, Louis Blériot)*
- Tell students to listen for the important events that happen during the Read-Aloud.

TEKS 2.6.G Evaluate details read to determine key ideas.

Lesson 5: The Race Is On

Read-Aloud

25M

Reading: Students will evaluate key details from the text and use evidence to support understanding.

TEKS 2.6.G

Language: Students will demonstrate understanding of the Tier 3 word *spherical*.

TEKS 2.3.B

PURPOSE FOR LISTENING

- Display the previously prepared anchor chart.
- Tell students to listen carefully during the reading for ways in which they can fill in the blanks in the sentence frames to demonstrate their understanding of the events in the story.
- Have students jot down key words or phrases that they hear in the text as evidence and be prepared to explain why it is a key detail.
- Tell students that you will model this for them first before they try it on their own.

"ALBERTO SANTOS-DUMONT" (15 MIN.)

- Begin reading aloud the story, "Alberto Santos-Dumont." As you read, incorporate the following information and guided reading supports:
  - Introduce the concept of identifying key details. Pause after the first paragraph and model how to identify a key detail. Explain that a key detail in this text is that Alberto Santos-Dumont likes to float over Paris in a flying machine.
  - Tell students that they will be listening for key details, or important events in the story, and may jot down words or phrases that they hear during the reading.
  - Repeat the process of modeling for students by thinking aloud the identification of a key detail in the text. Then, gradually release students to tell you the key details they hear.
  - Create a list of the key details from the text shared by students on the board or chart paper after each paragraph.

TEKS 2.6.G Evaluate details read to determine key ideas; **TEKS 2.3.B** Use context within and beyond a sentence to determine the meaning of unfamiliar words.

Show Image 5A-1: A young Santos-Dumont bound for Paris

Alberto Santos-Dumont could have done anything he wanted. His parents owned a giant plantation in Brazil. They sent coffee beans all over the world, and this business had made them, and their son Alberto, very rich. It would have been simple for the young Santos-Dumont to take it easy and enjoy his family's money for the rest of his life.

But Santos-Dumont didn't want to do that. He knew that he had been very lucky, and he also knew that it was only fair to give something back. He wanted to do something other than run a coffee plantation, something that would help many people. But what should that be? He didn't know yet. But he guessed that by leaving his home in Brazil for Paris, an exciting city full of culture and new inventions, he might start to find the answer for himself.

Show Image 5A-2: Santos-Dumont in a spherical balloon

In Paris, Santos-Dumont studied many subjects and sought out many adventures. In the year 1897, when he was twenty-four years old, he decided to take a balloon ride.

On the day of the flight, Santos-Dumont sat in the basket of a giant **spherical** balloon more than five times his height. His guide **inflated** the balloon, and it grew larger and larger as it filled with lighter-than-air gas. Then, suddenly, Santos-Dumont and his guide were rising into the sky!

The flight was smooth and almost silent. From where Santos-Dumont was standing in the basket, it looked like the earth was dropping away beneath his feet. He and his guide ate a delicious lunch above the clouds, and ice dusted the ropes and the edges of the basket. When he landed, Santos-Dumont knew what he wanted his dream to be. He would use his **wealth** to become a great aviator himself.

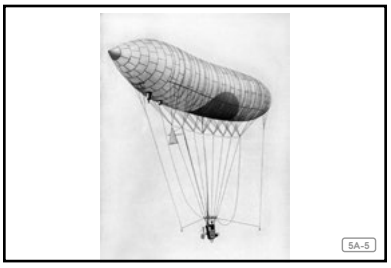
Show Image 5A-3: Santos-Dumont flying the *Brazil*

Santos-Dumont had soon built his own balloon. When you make your own balloon, you of course get to choose what to name it! Santos-Dumont thought long and hard about this choice. In honor of his homeland, Santos-Dumont named his balloon *Brazil*.

Show Image 5A-4: Santos-Dumont in his *Number 6* dirigible

The *Brazil* was only the beginning. Santos-Dumont kept building balloons, each more complicated than the last. He moved on from spherical balloons, which could only really go where the wind decided to carry them. His next balloons were dirigibles [/dee*ruh*juh*bl/], from the French word that meant "to steer", which means they were aircraft without wings. Now he could fly his balloons wherever he wanted.

Santos-Dumont was as natural as a bird at flying. He began to enter races and competitions to show off his skill and ingenuity. He entered one balloon, named *Number 6*, in a race to circle the Eiffel Tower and return to the starting line in less than thirty minutes. Santos-Dumont won the race, which earned him a huge cash prize. But he was rich, he thought. What did he need with more money? He gave away the prize to his mechanics and to the poor of Paris. After that, the people all knew his name, and they loved him.



Show Image 5A-5: Santos-Dumont in his airship

Santos-Dumont loved being famous. He especially loved showing people that flying could be a part of everyday life. One of his favorite things to do was to fly one of his airships to his favorite restaurant to have dinner. He would soar down the streets of Paris, wearing a wide-brimmed hat that he would tip to the people below him as he passed. On arriving at the restaurant, he would drop a guide rope and **descend** from the basket of his dirigible on a ladder. He would tie the rope

to a lamppost and go in to eat his dinner while the giant balloon floated just outside the windows.

Behind this **confidence**, there was a dream. When he had flown in his first balloon, he noticed how small and peaceful people looked from up high. If everyone could fly like he had, everyone would become more thoughtful and appreciative of one another. Flying could change the world, he thought. So he would continue to explore ways to make flying safer and easier for everyone.

Show Image 5A-6: Santos-Dumont in 1906
Other people were working to solve the problem of flight, of course! Across the ocean in the United States, the Wright brothers reported in December 1903 that they had successfully flown in something called an airplane. Inspired, Santos-Dumont set dirigibles aside and threw himself into building his own fixed-wing planes with motors. He made his first successful powered flight in his plane *No. 14-bis* before cheering crowds in 1906. He was the first person since the Wrights to succeed in building and flying a plane.

Show Image 5A-7: Santos-Dumont's *Desmoiselle*
Then, in 1909, he improved on the Wrights by creating one of the world's first single-wing planes, the *Desmoiselle*. If he sold his new design to manufacturers, he knew that he could earn a lot of money. But Santos-Dumont again thought about his luck. He had been so rich that he never had to worry about an ordinary job. He had been free to pursue his dream. It was time at last, he knew, to give something back.

Santos-Dumont gave away the plans to the *Desmoiselle* by publishing them in the magazine *Popular Mechanics*. Anyone who wanted to start building their own planes could use Santos-Dumont's discovery as a guide, absolutely free. It was an amazing gift. But sometimes when we give a gift away, we get a greater gift back. *[Ask, "What do you think that means?"]* By giving his plane designs away, Santos-Dumont knew he was inspiring the world to dream of flying, just as the aviator who had agreed to take Santos-Dumont on his first balloon flight in 1897 had once inspired him. He was helping to

build the peaceful world he had always wanted, where everyone could fly. Smiling to think of it, he again tipped his hat. *[Ask, "Do you think Santos-Dumont's dream will ever come true?]*

- Allow a few students to share their understanding of key details in the text, using the anchor chart sentence frame you have prepared: When _____ happened, it was a key detail, because...

COMPREHENSION QUESTIONS (5 MIN.)

1. **Literal.** What kind of transportation did Alberto Santos-Dumont use to get around? *(a dirigible or balloon)*
2. **Evaluative.** Why didn't Alberto want to stay and manage his family's plantation in Brazil? *(He wanted to try to contribute something that would help people.)*
3. **Literal.** How was a dirigible different from a balloon? *(Dirigibles were not shaped like a sphere and could be steered.)*
4. **Literal.** How did Alberto improve the Wright brothers' design? *(He Invented the one-wing airplane.)*
5. **Inferential.** Why do you think Alberto wanted to help others? *(He had experienced good luck his entire life and wanted to help others who were not as lucky as him.)*

WORD WORK: SPHERICAL (5 MIN.)

1. In the story, you heard the sentence "On the day of the flight, Santos-Dumont sat in the basket of a giant spherical balloon more than five times his height."
2. Say *spherical* with me.
3. *Spherical* means it is shaped like a sphere.
4. A hot air balloon is spherical because it is spherical in shape.
5. Can you think of why a balloon could fly better if it is spherical in shape?
6. What is the word we have been talking about?

Use a Draw It, Describe It activity for follow-up. Ask students to think of something that is spherical and make a drawing of it. Then have them describe their picture with a sentence that has the word *spherical* in it.

Challenge

Ask students to brainstorm why some people think Alberto Santos-Dumont made the world's first powered flight and not the Wright brothers.

Support

Have students refer to Activity Page 2.2 to review Louis Blériot.

Challenge

Ask students to find variations of the word *spherical* (round, circular, globular, ball-shaped, etc.). Have them create sentences using the variations.

Support

Provide a sentence frame for students (e.g., "___ is *spherical*.").

Lesson 5: The Race Is On

Application

25M

Writing: Students will identify resources to find answers to research questions about aviators and their contributions to aviation.

TEKS 2.13.B; TEKS 2.13.C; TEKS 2.13.D

RESEARCHING ANSWERS (25 MIN.)

Activity Page 4.1

- Ask students to turn to Activity Page 4.1 in their Activity Book.
- Tell students that they have been working on step 1 and that they will now move on to step 2. Ask a volunteer to read step 2 aloud.
- Explain to students that they need to identify resources where they can find answers to their questions. Explain that resources are other places they can use to find answers to their questions other than the story itself. Ask students for ideas or resource suggestions they can use to find answers. Write them in the class copy on Activity Page 4.1.
- If students have difficulty thinking about resources, provide categories and examples for each category, such as print (books, encyclopedias, magazines, articles), non-print (videos, photos), virtual field trips (Smithsonian Air and Space Museum, NASA), and online (research databases; check with your librarian for current databases).
- Model some of the resources you have prepared for the students. Explain that they will have to use the resources that are available at the school.

Activity Page 2.2

- **Think-Gather-Share:** Ask students to look at the resource ideas that were generated and discuss with a partner what resources they think they could use to find answers to their questions. Ask them to turn to Activity Page 2.2 and review the questions they have generated so far.
- Bring the class back together and ask for ideas about the resources available at the school. Cross out the resources that were generated that would not be available at the school on the class copy.

TEKS 2.13.B Develop and follow a research plan with adult assistance; **TEKS 2.13.C** Identify and gather relevant sources and information to answer the questions; **TEKS 2.13.D** Identify primary and secondary sources.

- Ask students to choose at least three of the resources they would like to use to find answers to their research questions. Ask them to write the name of the resources on Activity Page 4.1, in step 2.

Check for Understanding

What resources can we use to find answers to our questions? (the Read-Aloud texts, print *[books, encyclopedias, magazines, articles], non-print [videos, photos], virtual field trips, and online [research databases], etc.*)

Quick Write

- Name three resources that you could use to learn more about Alberto Santos-Dumont. **TEKS 2.13.C; TEKS 2.13.D**
- Writing: Activity Page 2.2: What else do you wonder about Alberto Santos-Dumont? Where can you find the answers? **TEKS 2.13.A**
- Have students complete Activity Page 2.2 with the name of the aviator and any questions/topics they have about the flying machines of Alberto Santos-Dumont. Also, have them list any resources they could use to answer their questions, such as the Read-Aloud or other locally approved sources.

End Lesson

Challenge

Ask students to create 3–5 more questions to their charts.

Support

Work with students individually to identify resources where they can find answers to their questions.

EMERGENT BILINGUAL STUDENTS

Application

Beginning
Allow students to draw resources they used to find answers.

Intermediate
Provide students with a completed list of resources and review it orally.

Advanced/Advanced High
After completing the Questions chart, ask students to orally explain it.

ELPS 4.B; ELPS 4.J

TEKS 2.13.C Identify and gather relevant sources and information to answer the questions; **TEKS 2.13.D** Identify primary and secondary sources; **TEKS 2.13.A** Generate questions for formal and informal inquiry with adult assistance.

LESSON

6

FLIGHT AND THE STORY OF AVIATION

Never Give Up

PRIMARY FOCUS OF LESSON

Reading

Students will listen actively and ask relevant questions to clarify information about Bessie Coleman.

TEKS 2.1.A

Language

Students will demonstrate understanding of the Tier 3 word *enthralled*.

TEKS 2.3.B

Writing

Students will generate questions about aviators and their contributions to aviation.

TEKS 2.13.A

FORMATIVE ASSESSMENT

Quick Write	If you had the opportunity to meet Bessie Coleman, what questions would you ask her? TEKS 2.13.A
Activity Page 2.2	What else do you wonder about Bessie Coleman? Where can you find the answers? TEKS 2.13.A; TEKS 2.13.C

TEKS 2.1.A Listen actively, ask relevant questions to clarify information, and answer questions using multi-word responses; **TEKS 2.3.B** Use context within and beyond a sentence to determine the meaning of unfamiliar words; **TEKS 2.13.A** Generate questions for formal and informal inquiry with adult assistance; **TEKS 2.13.C** Identify and gather relevant sources and information to answer the questions.

LESSON AT A GLANCE

	Grouping	Time	Materials
Introducing the Read-Aloud (10 min.)			
What Have We Already Learned?	Whole Group	10 min.	❏ world map or globe ❏ Activity Page 2.2 ❏ Aviation Timeline (Digital Components)
Essential Background Information			
Read-Aloud (25 min.)			
Purpose for Listening	Whole Group	25 min.	❏ model airplane ❏ Flipbook 6A-1-6A-11
Read-Aloud: "Bessie Coleman"			
Comprehension Questions			
Word Work: *Enthralled*			
Application (25 min.)			
Creating Better Questions	Whole Group/ Independent	25 min.	❏ Activity Pages 2.2, 6.1 ❏ Question Starters (Digital Components)

ADVANCE PREPARATION

Introducing the Read-Aloud

- Prepare Activity Page 2.2 for review.
- Display a world map or a globe.
- Prepare to group students in pairs for Think-Pair-Share.

Read-Aloud

- Gather a model airplane, or make a paper airplane.

Application

- Students will need Activity Page 2.2 for reference.
- Prepare to display Activity Page 4.1.
- Prepare Activity Page 6.1. The chart can also be accessed in the digital materials for the unit.
- Prepare to display the Read-Aloud from Lesson 5.
- Prepare question stems such as "When should . . .?" or "How could . . .?" and write them on chart paper.

Universal Access

- View images of airplanes, and have students discuss what they notice.

CORE VOCABULARY

tremendous, adj. marvelous or fantastic
Example: The performers were marvelous.
Variation(s): none

enthralled, v. to captivate or hold the attention
Example: I was enthralled as I watched the show.
Variation(s): none

Sayings and Phrases

golden age, a time period when there is great achievement in a particular field, such as art, literature, or science
Example: The time period between 1920 and 1960 is considered the golden age of film.

Vocabulary Chart for "Never Give Up"

Vocabulary Type	**Tier 3 Unit-Specific Words**	**Tier 2 General Academic Words**	**Tier 1 Everyday Speech Words**
Vocabulary	**enthralled**	tremendous *(tremendo/a)*	
Multiple-Meaning Vocabulary Words			
Sayings and Phrases	golden age		

Lesson 6: Never Give Up

Introducing the Read-Aloud

10M

Reading: Students will listen actively and ask relevant questions to clarify information. **TEKS 2.1.A**

Activity Page 2.2

WHAT HAVE WE ALREADY LEARNED? (5 MIN.)

- Say, "We have been reading lots of stories in the past week. What are some of the stories we have read?"
- Direct students to Activity Page 2.2. Ask them to review the questions they have recorded and to think whether any of the questions have been answered from the stories that they have read so far. Explain that one way in which we can find answers to our questions is to look for them in books. Tell them that books are a type of resource.
- Ask two or three volunteers to share any questions that may have been answered.
- Ask, "What characteristic do all the aviators share in those stories?" *(determination)*
- Explain that all the aviators they have read about so far have something in common besides determination. Ask if they can think of what it is. *(Guide students to realize that all aviators must be passionate about learning new information and be willing to take risks.)* Ask students to turn and talk to a partner about what might be required of someone who wants to become an aviator. Ask volunteers to share some of their thoughts with the class.

ESSENTIAL BACKGROUND INFORMATION (5 MIN.)

- Tell students that today they are going to read about another woman who made an impact on aviation—Bessie Coleman. Tell them that she was from Atlanta, Texas. Locate Atlanta, Texas, on the map.
- Ask a volunteer to locate Bessie Coleman on the Aviation Timeline.

TEKS 2.1.A Listen actively, ask relevant questions to clarify information, and answer questions using multi-word responses.

Lesson 6: Never Give Up

Reading

25M

Reading: Students will listen actively and ask relevant questions to clarify information.

TEKS 2.1.A

Language: Students will demonstrate understanding of the Tier 3 word *enthralled*.

TEKS 2.3.B

PURPOSE FOR LISTENING

- Tell students they are going to practice actively listening and asking questions during the Read-Aloud.

READ-ALOUD: "BESSIE COLEMAN" (15 MIN.)

Show Image 6A-1: Bessie Coleman

Bessie Coleman was one of our country's famous early aviators. She was one of the top barnstormers in the U.S. during the golden age of aviation. Her **tremendous** accomplishments came from courage, hard work, and determination.

Show Image 6A-2: Atlanta, TX

Bessie was born in Atlanta, Texas, on January 26, 1892, to a very large family. *[Locate Atlanta, Texas, on the Texas map, and discuss how far it is from your school.]* She had twelve brothers and sisters. Bessie's mother Susan worked as a maid. Her father George was a sharecropper. *A sharecropper is someone who farmed land that belongs to a landowner. The sharecropper would work and harvest the crop grown on the land. They would keep a small share of the crop while paying the landowner the rest as rent.*

TEKS 2.1.A Listen actively, ask relevant questions to clarify information, and answer questions using multi-word responses;
TEKS 2.3.B Use context within and beyond a sentence to determine the meaning of unfamiliar words.

Support

Provide students with opportunities to turn to a partner and discuss the text before asking a question.

Challenge

Ask students to generate more questions about the story.

Support

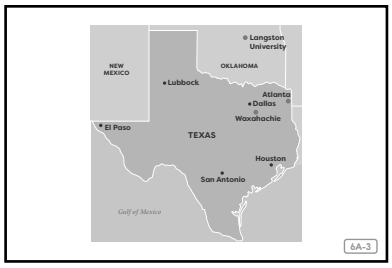
Explain that *tremendous* means marvelous or fantastic.

Challenge

Ask students to share a question they may have about the story they are going to read. Provide the sentence starter, "I wonder..."

Support

Crops are plants that are grown to be sold or consumed/eaten. Bessie's family farmed cotton. Texas is still one of the largest producers of cotton in the United States, along with other crops like rice, wheat, and corn. These products are exported throughout the United States.



Show Image 6A-3: Waxahachie and Atlanta

When she was nine, her family moved to Waxahachie, Texas. *[Locate Waxahachie, Texas, on the Texas map, and discuss how far Bessie's family moved.]* Bessie spent much of her time helping her mother. Even though times were tough and they didn't have a lot of money, Bessie and her mom worked hard together. They spent their days in the cotton fields and washed laundry to earn some extra money. Bessie learned important lessons about helping others and being strong, and she found joy in the simple things around her.

By the time she turned 18 years old, Bessie had saved enough money to attend school. She enrolled in what is now known as Langston University. *[Point out Langston University in Oklahoma on the map.]* However, after only one semester of college, Bessie had to drop out because she couldn't afford tuition. *Tuition is a fee paid for school.*

Support

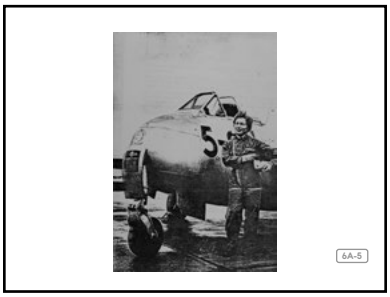
Reread "Bessie learned important lessons about helping others and being strong, and she found joy in the simple things around her." Explain what "found joy in the simple things around her" means.

Show Image 6A-4: Map of Illinois

Bessie then moved to Chicago to live with some of her brothers and sisters. *[Find Chicago, Illinois, on the U.S. map, and discuss how far Bessie moved.]* She went to school to become a manicurist, worked at a local barbershop, and managed a popular chili shop. Her brothers served in the military as the United States fought in World War I. *What are some of the experiences Bessie has had in her life?*

Challenge

Ask students to share questions they have about the text to clarify their own understanding. Provide the sentence starter, "I wonder..."



Show Image 6A-5: Female French Pilot

When her brothers came home from the war, they told Bessie their stories about their time fighting in France. Bessie was **enthralled** by her brothers' stories and adventures. She was fascinated when they mentioned that women in France were allowed to fly airplanes. *What does it mean to be enthralled? [Guide students to understand the word's meaning from the text.]*

But flying in the 1920s was not like today. Airplanes were still very new and very dangerous. There were few pilots—less than 300 pilots were in the entire U.S. Army Air Corps. There were few flight schools, and at the beginning of the 1920s, those flight schools that were open in the U.S. did not yet admit women.

But Bessie dreamed of becoming a pilot even if people thought it would be impossible.

Show Image 6A-6: France

Bessie applied to every American flight school, but they all turned her down. Her friend, a newspaper publisher, encouraged her to move to France so that she could learn how to fly. *Find France on the world map. [Guide students to understand the distance from Bessie's home in Chicago.]*

Bessie decided to take that advice. Because she was applying to a French flight school, her application had to be written in French, not English. But that didn't stop Bessie! She decided to learn French and took classes at night. Eventually, she mastered the French language and submitted her application to flight school. *What are some problems Bessie had to overcome so far on her journey to becoming a pilot? [Pause for students' responses and discussion.]*

Show Image 6A-7: Coleman's Pilot's License

Bessie was accepted into the Caudron Brothers' School of Aviation in France. This meant she had to move from the United States to France. Every day, she walked nine miles to and from school. *[Guide students to understand how far nine miles is by describing it in terms of the number of laps around their school gym.]* After two years, Bessie graduated and earned her pilot's license in June 1921, the first African American woman in the world to hold such a license. This brought her international fame.

Support

Ask students to turn and talk to a partner about Bessie's determination to learn another language. How will being determined help Bessie achieve her goals?

Challenge

Ask students to share questions they have about the text to clarify their own understanding. Provide the sentence starter, "I wonder..."

Show Image 6A-8: Coleman and her plane

After earning her pilot's license, Bessie moved back to the United States. Bessie started traveling around the United States, performing great flying stunts and giving speeches. Bessie was one of the top "barnstorming" pilots in the U.S.

Barnstorming was incredibly popular in the early 1920s, during what became known as the golden age of aviation. *What is a golden age?* Events in towns all over America were being scheduled on fields, farms, and outside of towns. There were almost no airports, so a barnstorming event could be scheduled anywhere there was flat open space. Barnstormer pilots would come to the events in their planes, at a time when most Americans had never seen a plane. Barnstormers would perform daring tricks in the air, sometimes recreating dog fights from World War I. *Dog fights are when planes fly very close together and take turns climbing, turning, and rolling.* And there were tremendous speed races, as planes and pilots continued to get more advanced. It was an amazing spectacle. *One famous pilot who got his start as a barnstormer was Charles Lindbergh. Another was Amelia Earhart.* But Bessie Coleman was perhaps the most daring barnstormer of them all.

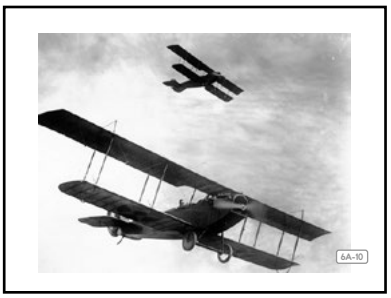
Bessie's most famous move was a "loop-the-loop" maneuver, where the plane would make a vertical circle in the air. This was at a time when almost no planes were designed to do that—the cockpits were sometimes completely open! But Bessie didn't stop there; she also did barrel rolls, figure-eights, and other tricks in the skies, to the delight of the people below. [*Use a model airplane to illustrate the tricks that Bessie did in her plane.*] In one of her most daring tricks, Bessie would hand over the controls to her co-pilot, walk out onto the wing of her plane as it was in flight, and parachute into the crowd below! Bessie's daredevil maneuvers and stunning courage earned her the nicknames "Queen Bess" and "Brave Bessie" from adoring crowds across the country. *Do you have a nickname?* [Pause for students' responses.]

Show Image 6A-9: Airshow

As Bessie's fame grew, she continued to travel the country and give both flight lessons and flight shows. She encouraged others to learn how to fly just like she did. In 1923, Bessie had her first real brush with danger. Her plane's engine stopped working in the middle of one

of her flights and crashed down to the ground. Although she was badly hurt, Bessie recovered, and soon, she was back soaring the skies in her airplane.

Show Image 6A-10: Jenny JN-4



Bessie was able to earn enough money to purchase her own plane, "Jenny," the JN-4. She returned to her hometown in Texas and continued to perform and use her fame and influence to fight for equality. But flying at the time was still very dangerous —even more so when you consider the tricks Bessie performed. Unfortunately, Bessie was fatally injured in a plane crash in 1926. Bessie's hard work and determination left a lasting legacy. At her funeral, Ida B. Wells, a famous African American civil rights leader, gave a speech about Bessie's life as a trailblazer. Aviation organizations honored her in many ways including a "flyover" where flowers were dropped on her gravesite. *A trailblazer is someone who is a pioneer or an innovator. What does it mean to "fly over" something? [Pause for students' responses.]*

Soon after her death, the "Bessie Coleman Aero Club" was organized in her honor. The club promoted Bessie's dream of expanding access to aviation for all.

Show Image 6A-11: Bessie Coleman quarter

In 1995, the United States Postal Service released a postage stamp in Bessie's honor. And there's even a quarter with Bessie Coleman on it. *[Show students a Bessie Coleman stamp, quarter, or both, if possible.]* This highlights the significant contributions she made to both aviation and the country as a whole. Bessie has also had numerous schools, streets, airports, memorials, and more named after her throughout the country. Her life reminds us that everyone in our great nation can achieve their dreams through hard work and determination.

Support

The word *fatal* means causing death.

COMPREHENSION QUESTIONS (5 MIN.)

1. **Literal.** Where did Bessie have to go to learn how to fly?
    - » Bessie was accepted into the Caudron Brothers' School of Aviation in France.
2. **Inferential.** In the text, Bessie's determination and influence in aviation in America made a huge impact. What type of impact is the story referring to?
    - » Bessie overcame hardship to pursue her dream of becoming a pilot. She became a pioneer in the field of aviation and opened the doors for other African Americans and women to pursue their dreams.
3. **Evaluative.** Why did people in the 1920s enjoy going to barnstorming events?
    - » Answers may vary but could include that airplanes were new, and they were curious to see something new. They enjoyed watching daring feats of courage.
4. **Literal.** What challenges did Bessie have to overcome in order to become a pilot?
    - » Answers may vary but could include that she had to help her mom at home with her twelve siblings, she had to pay for college, she had to earn enough money for flight school, she applied and was turned down at every flight school in the United States, she had to learn to speak French and move to France, she had to walk nine miles to the flight school each day, and she had to go to flight school for two years.
5. **Literal.** What were some of the maneuvers Bessie performed?
    - » She was a barnstorming pilot. She performed loop-the-loops, barrel rolls, and figure eights. She would walk out on the wing and parachute down.

WORD WORK: ENTHRALLED (5 MIN.)

1. In the story, you heard the sentence, "Bessie was enthralled by her brothers' stories and adventures."
2. Say *enthralled* with me.
3. *Enthralled* means "to capture the fascinated attention."
4. Bessie's brothers had captured her attention with their flying stories, which fascinated her. Let's look at some clues or hints the author wrote in the text to determine the meaning of this word.
5. Explain a time when you were being told a story and became enthralled.
6. What is the word that we have been talking about?

Lesson 6: Never Give Up

Application

25M

Writing: Students will generate questions about aviators and their contributions to aviation.

TEKS 2.13.A

CREATING BETTER QUESTIONS (25 MIN.)

- Review with students what research is.
- Display the class research plan (Activity Page 4.1). Discuss which steps have been taken and which step the class is currently working on.
- Create research questions.
- Ask students to take out Activity Page 2.2. Project the Question Starters chart, and ask students to find Activity Page 6.1 in their Activity Book.
- Tell students that they created good questions during the Read-Aloud. Tell them that now they are going to make the questions even better by using different question starters.
- Model how to use one of the questions that was recorded during the reading of the story and turn it into an even better question.
- For example, tell students that you are going to use the question, "What does Bessie Coleman want to learn to do?" Using one word from each column on the chart, model how to create an even better question.
- Say, "If I use the words how and might, I could ask, 'How might Bessie Coleman obtain her pilot's license?'" Write the new question on the board or chart paper.
- Ask students to choose some of the questions they have recorded from previous lessons on Activity Page 2.2.
- Explain that they are going to turn them into even better questions using Activity Page 6.1.
- Have students create at least three new questions.
- Ask several volunteers to share the new questions they created.

Activity Pages 2.2 and 6.1

Support

Provide question frames for students to use. For example, "When should . . .?" or "How could . . .?"

Challenge

Ask students to choose a sentence starter from the "Even Better Sentence Starters" list that they haven't used yet to create a new question.

TEKS 2.13.A Generate questions for formal and informal inquiry with adult assistance.

EMERGENT BILINGUAL STUDENTS

Writing

Research

Beginning
Provide 1:1 support when students are generating questions. Practice distinguishing sounds and intonation patterns of English with increasing ease.

Intermediate
Have students work with a partner to generate questions.

Advanced/Advanced High
Provide students with question starter combinations to use when generating questions. For example, "Where does . . .?" or "Why might . . .?"

ELPS 2.A; ELPS 2.E; ELPS 4.G

Quick Write

- If you had the opportunity to meet Bessie Coleman, what questions would you ask her? **TEKS 2.13.A**
- Writing: Activity Page 2.2: What else do you wonder about Bessie Coleman? Where can you find the answers? **TEKS 2.13.A; TEKS 2.13.C**
- Have students complete Activity Page 2.2 for this lesson. Also, have them list any resources they could use to answer their questions.

End Lesson

TEKS 2.13.A Generate questions for formal and informal inquiry with adult assistance; **TEKS 2.13.C** Identify and gather relevant sources and information to answer the questions.

LESSON

7

FLIGHT AND THE STORY OF AVIATION

Lucky Lindy

PRIMARY FOCUS OF LESSON

Reading

Students will make and confirm predictions about the text.

TEKS 2.6.C

Language

Students will demonstrate understanding of the Tier 3 word *aloft*.

TEKS 2.3.B

Writing

Students will identify resources to find answers to research questions about aviators and their contributions to aviation.

TEKS 2.13.C; TEKS 2.13.D

FORMATIVE ASSESSMENT

Quick Write	Name three resources you could use to find out more details about Charles Lindbergh. TEKS 2.13.C; TEKS 2.13.D
Activity Page 2.2	What else do you wonder about Charles Lindbergh? Where can you find the answers? TEKS 2.13.A; TEKS 2.13.C

TEKS 2.6.C Make and correct or confirm predictions using text features, characteristics of genre, and structures; **TEKS 2.3.B** Use context within and beyond a sentence to determine the meaning of unfamiliar words; **TEKS 2.13.C** Identify and gather relevant sources and information to answer the questions; **TEKS 2.13.D** Identify primary and secondary sources; **TEKS 2.13.A** Generate questions for formal and informal inquiry with adult assistance.

LESSON AT A GLANCE

	Grouping	Time	Materials
Introducing the Read-Aloud (10 min.)			
Making Connections	Whole Group	10 min.	❏ Activity Page 2.2 ❏ U.S. map and world map
Essential Background Information			
Read-Aloud (25 min.)			
Purpose for Listening	Whole Group	25 min.	❏ *Flight* by Robert Burleigh ❏ Image Cards 2-3 ❏ Lindbergh Flight Map (Digital Components) ❏ Aviation Timeline (Digital Components) ❏ Activity Page 2.2
Flight			
Comprehension Questions			
Word Work: *aloft*			
Application (25 min.)			
Searching for Answers	Whole Group/ Independent	25 min.	❏ Activity Pages 2.2, 4.1, 6.1

ADVANCE PREPARATION

Introducing the Read-Aloud

- Students will need to reference Activity Page 2.2.
- Gather or prepare to display a U.S. map and a world map.

Read-Aloud

- Prepare to read aloud the trade book *Flight* by Robert Burleigh. As you preview the book, you may wish to add page numbers and reference the guided reading supports included in this lesson. This trade book does not have numbered pages, but for ease of use we have referred to page numbers in our materials. We begin with page 1, which begins with the sentence "It is 1927, and his name is Charles Lindbergh," and number each page in order after that.
- Prepare to display or project Image Cards 2 and 3.
- Prepare to display or project the Lindbergh Flight Map (Digital Components).
- There are many figurative phrases used throughout this story. As you read them, explain to students what each means. For example, "last bow to earth" describes how the plane might acknowledge that it had once been on land, but now it is in the sky; "chart his course" means to determine a route or to create a plan to achieve a goal; "the sod coming up to meet me" describes how at the end of Lindbergh's flight there was nothing left to do but land/the Earth was waiting for his return.

Application

- Prepare Activity Page 2.2 for reference.
- Prepare to display class copies of Activity Pages 4.1 and 6.1.
- Prepare a research question and the resources where the answer can be found to model how to find information.
- Create a list of locally approved sources. Consider checking in with your librarian for approved sources to use.

CORE VOCABULARY

aloft, adv. up in the air
Example: On the third try, my model airplane stayed aloft.
Variation(s): None

parachute, n. a cloth that, when filled with air, allows a person or object to descend slowly when it is dropped from an airplane
Example: When I went skydiving, I made sure my parachute was strapped to me before I jumped from the plane.
Variation(s): parachutes

periscope, n. an instrument used to see things that are not in the viewer's direct line of sight
Example: Charles Lindbergh used a periscope to see things on land from his airplane that he could not directly see because of the position of the fuel tank.
Variation(s): None

throttle, n. a device on a machine, like a car or airplane, that controls the flow of fuel to an engine, allowing the machine to speed up
Example: When you press a car's gas pedal, it opens the throttle and allows the car to speed up.
Variation(s): None

Vocabulary Chart for "Lucky Lindy"

Type	**Tier 3 Unit-Specific Words**	**Tier 2 General Academic Words**
Vocabulary	aloft periscope *(periscopio)*	
Multiple-Meaning Vocabulary Words	throttle	parachute
Sayings and Phrases	"last bow to Earth" "chart his course" "the sod coming up to meet me"	

Lesson 7: Lucky Lindy

Introducing the Read-Aloud

10M

Primary Focus: Students will make and confirm predictions about the text.

TEKS 2.6.C

MAKING CONNECTIONS (5 MIN.)

- Ask students to turn to Activity Page 2.2 in their Activity Book.
- Discuss with students how Bessie Coleman was able to achieve her goal of becoming a pilot. Have them refer to Activity Page 2.2. Ask students how the stories they have read so far are related. Talk about the different types of flying machines from the stories.
- Tell students that guessing or predicting what may happen in a story is a fun way to read and will help them understand what happens in a story.
- Show students the front and back covers of the trade book, and read the title. Ask them what they think this book may be about.
- Read the summary of the book on the back cover to students. Encourage them to make predictions based on this.

ESSENTIAL BACKGROUND INFORMATION (5 MIN.)

- Explain that this story is about an American aviator named Charles Lindbergh. [Show Image Card 1.] Ask students which other aviator they have learned about was also from the United States. *(Bessie Coleman)* Tell students that Charles Lindbergh was from Minnesota. [Show students where Minnesota is located on a U.S. map.] In 1922, Lindbergh enrolled in Nebraska Aircraft Corporation's flying school in Lincoln, Nebraska. [Show students where Nebraska is on a U.S. map.] He left flight school and began barnstorming across the United States, performing as a wing walker and parachutist. In 1924, Lindbergh reported to Brooks Airfield in San Antonio, Texas, to begin flight training with the United States Army Air Service. [Point out San Antonio, Texas, on a U.S. map.] He graduated from flight school in 1925 as a second lieutenant in the Air Service Reserve Corps, which is known today as the Air Force Reserve. Explain that today's story is about

TEKS 2.6.C Make and correct or confirm predictions using text features, characteristics of genre, and structures.

Lindbergh's experience making a transatlantic flight from New York City, United States, to Paris, France. [Show each location on a map.]

- Ask students to think about the prediction they made earlier and determine whether, with this new information, they can confirm their prediction.

Lesson 7: Lucky Lindy

Read-Aloud

25M

Reading: Students will make and confirm predictions about the text.
TEKS 2.6.C

Language: Students will demonstrate understanding of the Tier 3 word *aloft*.
TEKS 2.3.B

PURPOSE FOR LISTENING

- Tell students that as you read the story, they should make predictions about what they think will happen based on what the characters say, do, and think. Remind them to revise or confirm their predictions as they learn more about the events of the story.

READ-ALOUD: FLIGHT (15 MIN.)

- Read aloud *Flight* by Robert Burleigh. As you read, incorporate the following information and guided reading supports:
  - After reading page 1, show students Image Card 2, which is an image of Lindbergh's plane, Spirit of St. Louis. Have students turn and talk with a partner and discuss what kind of plane it is and how it is similar to/different from other planes they have learned about. Explain to students that the plane was named the Spirit of St. Louis after a group of businessmen who financed, or paid for, Lindbergh's flight.
  - On page 5, ask students to make a prediction about whether or not they think the plane will be able to make its journey. Ask students to share reasons why or why not. *(Answers may include that it took three tries before the plane would stay in the air or that the plane barely makes it over the telephone wire at the end of the field.)* Display or project the Lindbergh Flight Map (Digital Components) and put a checkmark on the box next to New York to show that Lindbergh has taken off and is en route to Paris.

TEKS 2.6.C Make and correct or confirm predictions using text features, characteristics of genre, and structures; **TEKS 2.3.B** Use context within and beyond a sentence to determine the meaning of unfamiliar words.

- Pause after reading page 10. Ask students how they think Lindbergh is feeling at this point in his flight. Then, model making, revising, and confirming predictions. Think aloud, "When I read the summary at the back of the book, I was sure that Charles Lindbergh made the flight to Paris. So far, my prediction is correct. From what we have read so far, Lindbergh has made it to Newfoundland." Put a checkmark in the box beside Newfoundland on the Lindbergh Flight Map (Digital Components) to show where Lindbergh is on his flight path.
- Reread the sentences, "Now he can no longer follow the land's edge for direction. He must chart his course carefully. The slightest movement could send him miles off course and risk the fuel supply." Ask students to predict what they think will happen during the next period of Lindbergh's flight. Tell students that you will continue reading so that they can confirm or revise their predictions.
- Pause after reading page 19, and ask students whether their predictions were correct. Put a checkmark in the box beside Ireland on the Lindbergh Flight Map (Digital Components) to show where Lindbergh is on his flight path.
- Pause after reading page 24, and ask students to predict how people in Paris and the United States will react once they realize that Lindbergh has successfully completed his flight. Put a checkmark next to Paris on the Lindbergh Flight Map (Digital Components) to show that Lindbergh has successfully completed the flight.
- As you continue reading, encourage students to make, revise, and confirm their predictions.
- After reading, discuss with students how making predictions about what will happen in the story keeps the reader involved in the reading process and helps the reader understand and remember what was read.
- Ask a volunteer to locate Charles Lindbergh on the Aviation Timeline. *(1927)*

Support

Have students refer to the Lindbergh Flight Map (Digital Components) throughout the Read-Aloud to keep track of where Lindbergh is throughout the story.

Challenge

Have students create their own flight map to a chosen destination.

DISCUSSING THE READ-ALOUD (5 MIN.)

1. **Literal.** Where did Charles Lindbergh and the Spirit of St. Louis begin their journey and where did it end? *(It began in New York City, United States, and ended in Paris, France.)*
2. **Literal.** How long did the flight take? *(33.5 hours)*
3. **Inferential.** At the beginning of the book, you heard that people would soon call Charles Lindbergh "Lone Eagle" and "Lucky Lindy." Why do you think people gave him those nicknames? *(Answers may vary but could include that he was given the nickname "Lone Eagle" because he was the only person on*

his trip, and he was like an eagle flying high in the sky. The nickname "Lucky Lindy" most likely was given because it was a dangerous trip to make, and Lindbergh was lucky to have made it with minimal issues.)

4. **Inferential.** At what point in the story do you think Charles Lindbergh realized that he was going to make it to Paris? Explain your answer. *(Answers may vary but could include when he flew over land after crossing the entire Atlantic Ocean, or when he realized he was flying over Ireland and was right on course.)*

5. **Evaluative.** Explain how Charles Lindbergh impacted the world of aviation. *(Answers may vary but could include that Lindbergh's successful flight showed that it was possible to fly such long distances, which opened the door for other aviators and engineers to do the same.)*

WORD WORK: ALOFT (5 MIN.)

1. In the story, you heard, "On the third try, it stays aloft."
2. Say *aloft* with me.
3. *Aloft* means up into the air.
4. In this story, *aloft* is an adverb, which means it describes a verb or action. What could be described as aloft in *Flight*?
5. Share some other things that could be described as being *aloft*.
6. What is the word we've been talking about?

Lesson 7: Lucky Lindy

Application

25M

Writing: Students will identify resources to find answers to research questions about aviators and their contributions to aviation.

TEKS 2.13.C; TEKS 2.13.D

SEARCHING FOR ANSWERS (25 MIN.)

Activity Pages 2.2 and 4.1

- Ask students to turn to Activity Page 4.1 in their Activity Book.
- Explain to students the difference between primary sources and secondary sources.
  - Primary sources are written or verbal accounts from people who witnessed an event firsthand.

TEKS 2.13.C Identify and gather relevant sources and information to answer the questions; **TEKS 2.13.D** Identify primary and secondary sources.

Support

Share the definition of *firsthand* with students. *Firsthand* means gotten from direct experience or observation. Provide a few examples and ask if the example would be a time when someone received firsthand knowledge: A teacher explaining how to solve a math problem to you in class *(yes)* or your friend telling you what another person said at recess *(no)*.

Support

Have students work with a teacher to identify appropriate resources for their research and where they can find them.

Challenge

Have students find a resource to answer a question on Activity Page 2.2. Then ask them to write the answer to the question.

- Secondary sources are usually books or articles written by people who have learned about a specific event or person. They do not have firsthand knowledge.
- Tell students that they have been working on step 1 of the research process, and they will now move on to step 2. Ask for a volunteer to read step 2 aloud.
- Tell students that the next step is to identify and gather resources where they can find information to answer their questions.
- Explain that resources are other places they can use to find answers to their questions in addition to the story. Ask students for ideas or suggestions of resources they could use to find answers. Write these on the class copy of Activity Page 4.1.
- If students have difficulty thinking of resources, provide them with categories and examples for each category, such as print (books, encyclopedias, magazines, articles), nonprint (approved videos and photographs), virtual field trips (NASA and the Smithsonian Air and Space Museum), and online (research databases such as Britannica Online and Kidtopia; check with your librarian for current databases).
- **Teacher Note:** Before sharing any resources (online or print), preview them to ensure they are appropriate for this grade-level.
- Provide students with a list of locally approved sources. Consider checking with your librarian for approved sources to use.
- **Think-Pair-Share:** Ask students to look at the resource ideas that were generated and discuss with a partner which resources they think they would be able to use to find answers to their questions. Have them refer to Activity Page 2.2 to review the questions they have generated so far.
- Gather the class together again, and ask for ideas of which resources are available at the school. Cross out on the class copy any resources that were generated that would not be available at school.
- Tell students to choose at least three of the resources they would like to use to find answers to their research questions. Ask them to write the name of the resources on Activity Page 4.1 under step 2.

Quick Write

- Name three resources you could use to find out more details about Charles Lindbergh. **TEKS 2.13.C; TEKS 2.13.D**
- Writing: Activity Page 2.2: What else do you wonder about Charles Lindbergh? Where can you find the answers? **TEKS 2.13.A; TEKS 2.13.C**
- Have students complete Activity Page 2.2 for this lesson. Also, have them list any resources they could use to answer their questions.
- Is there a difference between primary and secondary sources? How do you know? **TEKS 2.13.D**

End Lesson

EMERGENT BILINGUAL STUDENTS

Writing

Beginning
Provide a list of specific research resources for students. Allow students to work together to look through the provided resources or work 1:1 with the teacher.

Intermediate
Have students work with a partner to determine which resources are appropriate to use for their research.

Advanced/Advanced High
Have students explain to a partner why the resources they are using are appropriate for their research.

ELPS 2.G; ELPS 4.I; ELPS 5.G

TEKS 2.13.C Identify and gather relevant sources and information to answer the questions; **TEKS 2.13.D** Identify primary and secondary sources; **TEKS 2.13.A** Generate questions for formal and informal inquiry with adult assistance.

LESSON

8

FLIGHT AND THE STORY OF AVIATION

I Knew I Had to Fly!

PRIMARY FOCUS OF LESSON

Reading

Students will retell and paraphrase texts in ways that maintain meaning and logical order.

TEKS 2.7.D

Language

Students will demonstrate understanding of the Tier 2 word *barrier*.

TEKS 2.3.B

Writing

Students will practice finding answers to research questions about aviators and their contributions to aviation.

TEKS 2.13.C

FORMATIVE ASSESSMENT

Quick Write	Use information about Amelia Earhart located during the research process to write or illustrate a news story about a barrier in her life and how she dealt with it. TEKS 2.8.B; TEKS 2.13.C
Activity Page 2.2	What else do you wonder about Amelia Earhart? TEKS 2.13.C

TEKS 2.7.D Retell and paraphrase texts in ways that maintain meaning and logical order; **TEKS 2.3.B** Use context within and beyond a sentence to determine the meaning of unfamiliar words; **TEKS 2.13.C** Identify and gather relevant sources and information to answer the questions; **TEKS 2.8.B** Describe the main character's (characters') internal and external traits.

LESSON AT A GLANCE

	Grouping	Time	Materials
Introducing the Read-Aloud (10 min.)			
Making Connections	Whole Group	10 min.	❏ Aviation Timeline (Digital Components) ❏ Activity Page 2.2 ❏ world map
Essential Background Information			
Read-Aloud (25 min.)			
Purpose for Listening	Whole Group	25 min.	❏ Aviation Timeline (Digital Components) ❏ Activity Page 2.2 ❏ world map
"Overcoming Barriers: Amelia Earhart"			
Comprehension Questions			
Word Work: *Barrier*			
Application (25 min.)			
Searching for Answers	Whole Group/ Partner	25 min.	❏ Activity Pages 2.2, 4.1

ADVANCE PREPARATION

Introducing the Read-Aloud

- Prepare to display the Aviation Timeline.
- Students will need to reference Activity Page 2.2.

Read-Aloud

- Prepare to read the ReadWorks passage "Overcoming Barriers: Amelia Earhart."

Application

- Display Activity Page 4.1.
- Group students in pairs to work together at various times during the Application activity.
- Prepare resources that students can use for their research, such as website addresses for school-permitted search engines, trade books from the unit, examples of primary and secondary sources, and additional books from the school library. Ensure that all student research using the internet is monitored.

Universal Access

- Students may reference Activity Page 2.2 throughout the lesson.

CORE VOCABULARY

achievement, n. something that has been done or achieved through effort; a result of hard work
Example: Learning how to ride a bicycle is a great achievement.
Variation(s): achievements

advocating, v. speaking in favor of; arguing for
Example: The president of the student council is advocating for an extra recess everyday.
Variation(s): advocated

altitude, n. the height of something (such as an airplane) above the level of the sea
Example: The airplane was flying at an altitude of 30,000 feet above sea level.
Variation(s): none

barrier, n. something that keeps apart or makes progress difficult
Example: The colonists faced many barriers in their fight for independence.
Variation(s): barriers

massive, n. very large, heavy, and solid
Example: The cargo ship in the harbor was massive.
Variation(s): none

sensation, n. a state of excited interest or feeling
Example: The rumor caused a sensation in the third grade.
Variation(s): sensations

ticker-tape parade, n. a parade in which small pieces of paper are thrown into the air to celebrate something
Example: When the football team won the state championship, the town had a ticker-tape parade.
Variation(s): none

transatlantic, n. crossing or being beyond the Atlantic Ocean
Example: My parents went on a transatlantic cruise last summer.
Variation(s): none

Vocabulary Chart for "Overcoming Barriers: Amelia Earhart"

Vocabulary Type	**Tier 3** **Unit-Specific Words**	**Tier 2** **General Academic Words**	**Tier 1** **Everyday Speech Words**
Vocabulary	altitude (*altitud*) transatlantic (*transatlántico/a*)	achievement advocating ticker-tape parade	
Multiple-Meaning Vocabulary Words		**barrier** massive (*masivo/a*) sensation (*sensación*)	
Sayings and Phrases			

Lesson 8: I Knew I Had to Fly!

Introducing the Read-Aloud

10M

Reading: Students will retell and paraphrase texts in ways that maintain meaning and logical order.

TEKS 2.7.D

Activity Page 2.2

MAKING CONNECTIONS (5 MIN.)

- Ask students to turn to Activity Page 2.2 in their Activity Book.
- Explain that events in a text are often told in a specific order, from beginning to end. Sometimes authors use words such as *first*, *next*, and *last*. Write these three words on the board or chart paper.
- Direct students' attention to the Aviation Timeline and ask, "What was one of the first discoveries in the history of aviation?" (the bamboo-copter, the Montgolfier brothers realizing that heating air could make it rise and creating a hot-air balloon, and the Wright Brothers designing a glider). Ask them to name some of the other aviators they learned about. *(Joseph and Étienne Montgolfier, Wilbur and Orville Wright, Louis Blériot, Alberto Santos-Dumont, Bessie Coleman, Charles Lindbergh)*. Ask students to share who was the last aviator they learned about *(Charles Lindbergh).*
- Show students the ReadWorks passage and have them predict what will happen based on the photograph and the section titles.

ESSENTIAL BACKGROUND INFORMATION (5 MIN.)

- Tell students that they are going to hear a story about another aviator named Amelia Earhart, who was from the United States. Point out the country on a map.
- Explain that she persisted despite many challenges. Ask students to think of some other aviators who persisted even when faced with many challenges.

TEKS 2.7.D Retell and paraphrase texts in ways that maintain meaning and logical order.

Lesson 8: I Knew I Had to Fly!

Read-Aloud

25M

Reading: Students will retell and paraphrase texts in ways that maintain meaning and logical order.

TEKS 2.7.D

Language: Students will demonstrate understanding of the Tier 2 word *barrier*.

TEKS 2.3.B

PURPOSE FOR LISTENING

- Tell students to listen carefully to find out more about Amelia Earhart and why she is considered by many to be a legend. Remind them that she faced many barriers in her life and was able to overcome many of them to achieve her dream of flying.

"OVERCOMING BARRIERS: AMELIA EARHART" (15 MIN.)

- Read aloud the ReadWorks passage "Overcoming Barriers: Amelia Earhart." As you read, incorporate the following information and guided reading supports:
  - Explain that a *barrier* is something that can get in the way of trying to achieve something. Ask, "Can you think of any other aviators you have learned about that faced barriers?"
  - Pause after reading the first section and model sequencing events of the article. Say, "This article is providing me with many events from Amelia Earhart's life. First, she was born in Kansas in 1897. She saw her first airplane when she was twelve years old and did not take her first flight until she was twenty-three. Then, she took lessons to learn how to fly, bought an airplane, and earned her pilot's license. I will continue reading to find out what happens next."
  - Explain that *altitude* is the height of something above sea level. Airplanes usually fly at an altitude of 35,000 feet above sea level.
  - An *achievement* is something that is done or achieved through a lot of effort. Ask students to share an achievement that they are proud of.

Support

Tell students that being a *legend* means to be very well-known in a specific field. Ask students if they know any other people who are considered *legends*.

TEKS 2.7.D Retell and paraphrase texts in ways that maintain meaning and logical order; **TEKS 2.3.B** Use context within and beyond a sentence to determine the meaning of unfamiliar words.

Challenge

Have students create research questions about one of the other aviators mentioned in the article.

Support

Provide sentence frames to help students sequence events of the article.

- A *sensation* is a state of excited interest or feeling. Ask students to think of someone or something that happened that would cause a media sensation.
- A *ticker-tape parade* is a parade in which small pieces of paper are thrown into the air to celebrate something. New York City has had many ticker-tape parades.
- *Advocating* means that you speak in favor of someone or something. Ask students to think of a time when someone has advocated for them.
- *Transatlantic* means crossing the Atlantic Ocean. Point out the Atlantic Ocean on the map.
- *Massive* means really big. It can also mean something that is very heavy.
- Ask a volunteer to point out Amelia Earhart on the Aviation Timeline. *(1932, 1937)*

COMPREHENSION QUESTIONS (5 MIN.)

1. **Literal.** Name a barrier that Amelia Earhart faced. *(Answers may vary but should include that, in her time, women were not afforded the same opportunities as men.)*
2. **Literal.** Who was Neta Snook? *(She was Amelia's first flight instructor and one of the first women to graduate from the Curtiss School of Aviation.)*
3. **Literal.** What was the first record that Amelia Earhart set? *(an altitude record for women of 14,000 feet)*
4. **Literal.** How would you describe the sequence of events after Amelia Earhart flew across the Atlantic Ocean? Use sequencing words such as *first*, *next*, and *last*. *(Answers may vary.)*
5. **Inferential.** Think-Pair-Share: What do you think would have happened if Amelia Earhart had completed her flight around the world? *(Answers may vary.)*

WORD WORK: BARRIER (5 MIN.)

1. The title of the article is "Amelia Earhart: Overcoming Barriers."
2. In this article, a *barrier* is something that must be overcome to achieve a goal.
3. Many of the aviators we have learned about had to overcome many *barriers* to achieve their dream of flying.
4. Can you think of any other people who have had to overcome barriers to achieve their goals?
5. What is the word we have been talking about?

Use a Making Choices activity for follow-up. Say: "I am going to read sentences about some people. If the sentence describes someone who overcame barriers, say, 'She/he overcame a barrier.' If the sentence does not describe someone who overcame a barrier, say, 'She/he did not overcome a barrier.'"

- As a child, Albert Einstein was reluctant to say anything or talk at all, but he went on to become one of the world's greatest scientists. *(He overcame a barrier.)*
- Helen Keller was deaf and blind, but she went on to be the first deaf and blind person to earn a college degree. *(She overcame a barrier.)*
- Ruby Bridges became the first African American student in the South to enter a previously all-white elementary school. *(She overcame a barrier)*.
- At a time when few women were able to be educated, Marie Curie became one of the most important scientists of her generation. *(She overcame a barrier.)*

Challenge

Have students brainstorm a list of more historical figures who overcame barriers.

Support

Have students use two or three academic words when discussing a barrier that Amelia Earhart faced.

Lesson 8: I Knew I Had to Fly!

Application

25M

Writing: Students will practice finding answers to research questions about aviators and their contributions to aviation.

TEKS 2.13.C

SEARCHING FOR ANSWERS (25 MIN.)

- Review the research plan using the class copy of Activity Page 4.1.
- Tell students that it is time to start finding answers to their research questions. Explain that as a class you will begin researching the life of Amelia Earhart.
- Ask students to brainstorm topics or questions to find out more about Amelia Earhart. Write three appropriate questions on the board or chart paper.
- Select one of the questions to research and explain that you are going to choose locally approved sources to find information about the topic.
- Ensure all research using the internet is monitored throughout the activity.
- Explain that searching is easy, but doing a good search can be tricky. In order to do a good search, students will need to know what search terms to type in, which search results apply to the topic or question, and which results provide reliable information.
- Tell students that search terms are the words that are typed into search engines when searching for something. Choose a research resource, such as a school-approved search engine, and explain that it is best to start with a simple search term or key word.
- Explain that many search results will be displayed and that it is important to choose appropriate sources.
- Tell students that they can start by looking carefully at each item in the list.
- Explain to students that they can use locally approved sources. They can evaluate which locally approved resource might be most reliable.

Challenge

Have students find and compare information from multiple sources and note any differences in the information they find.

Support

Work with students individually to clarify the information from research resources that can be used as they search for answers to their topics and questions.

TEKS 2.13.C Identify and gather relevant sources and information to answer the questions.

- Tell students that they should look for websites that are created by experts. Teachers will curate a list of locally approved resources that have been vetted by the school district and librarian. Ask students to think of some websites that would be reliable sources.
- Once you find an appropriate website, show students how to paraphrase key information about the topic that answers the question. Explain that when you paraphrase, you put the text in your own words. Write the information you found on the board or chart paper.
- Repeat this process with another topic or question generated by the class about Amelia Earhart.
- Have students work with a partner to research the answer to the last topic or question about Amelia Earhart.
- Students do not have to use the internet to do their research. You may wish to consult with your librarian to gain access to encyclopedias, magazines, or other books related to the topic of aviation.
- After students have finished researching, gather the class together and ask what information they were able to find about the topic.
- Have students share some of the information they found and record it on the board or chart paper.
- Point out any information that does not seem to be reliable and explain why it is not reliable—for example, it greatly deviates from the other information that was found.

Quick Write

- Write a sentence about a barrier in Amelia Earhart's life and how she dealt with it using evidence from the article. **TEKS 2.8.B; TEKS 2.13.C**
- Writing: Activity Page 2.2: What else do you wonder about Amelia Earhart? **TEKS 2.13.C**
- Have students complete Activity Page 2.2 for this lesson. Also, have them list any resources they could use to answer their questions.

End Lesson

EMERGENT BILINGUAL STUDENTS

Application

Beginning
Have students use specific teacher-suggested resources to locate information to understand the general meaning, main points, and important details.

Intermediate
Allow students to draw or sketch the information they found about their topic or question to understand the general meaning, main points, and important details.

Advanced/Advanced High
Have students paraphrase the information they found in their research to understand the general meaning, main points, and important details.

ELPS 2.G; ELPS 4.I; ELPS 5.G

TEKS 2.8.B Describe the main character's (characters') internal and external traits; **TEKS 2.13.C** Identify and gather relevant sources and information to answer the questions.

Grade 2 Unit 11

Pausing Point

Note to Teacher

You should pause here and spend two days reviewing, reinforcing, or extending the material taught thus far.

You may havew students do any combination of the activities listed below. The activities may be done in any order. You may also choose to do an activity with the whole class or with a small group of students who would benefit from a particular activity.

Encourage students to practice cursive on Activity Book assignments with one-word or short-phrase responses. **TEKS 2.2.E**

CORE CONTENT OBJECTIVES UP TO THIS PAUSING POINT

Students will:

- Establish the purpose of reading about key figures in the history of aviation
- Explain how the Montgolfier brothers invented the hot-air balloon
- Make inferences about the impact of the Wright brothers' first flight on aviation
- Describe Louis Blériot's flight across the English Channel
- Explain key details about Alberto Santos-Dumont's flying machines
- Actively listen and ask relevant questions to clarify information about Bessie Coleman
- Make and confirm predictions about Charles Lindbergh
- Retell and paraphrase a passage about the barriers that Amelia Earhart faced in her quest to fly around the world

TEKS 2.2.E Develop handwriting by accurately forming all cursive letters using appropriate strokes when connecting letters.

ACTIVITIES

Image Review

- Show the Flip Book images from any Read-Aloud again, and have students retell the Read-Aloud using the images.

Key Vocabulary Brainstorming

Materials: Chart paper, chalkboard, or whiteboard

- Give students a key unit concept or vocabulary word such as *lift*. Have them brainstorm everything that comes to mind when they hear the word, such as aviation, curve, force, flight, etc. Record their responses on a piece of chart paper, a chalkboard, or a whiteboard for reference.

Venn Diagram

Materials: Chart paper, chalkboard, or whiteboard, notebook paper, pencil

- As a class, make a list of the people discussed up to to this point in the unit.
  - Joseph and Étienne Montgolfier
  - Wilbur and Orville Wright
  - Louis Blériot
  - Alberto Santos-Dumont
  - Bessie Coleman
  - Charles Lindbergh
  - Amelia Earhart
- On chart paper, chalkboard, or a whiteboard, model drawing a Venn diagram for students. Tell students to take out a piece of notebook paper and create their own Venn diagram. Model showing students how to label each section of the diagram.
- With a partner, have students choose two people and identify ways that their lives and contributions to the field of aviation are similar and different. Tell students to create a Venn diagram of the two people they chose. When students finish, have several partners share their diagrams with the class.

Note: You may wish to have students draw a picture to accompany their diagram.

Riddles for Core Content

- Ask students riddles such as the following to review core content:
    - I am one of the most famous female aviators in the United States and around the world. I made many long distance flights in my career. During my last flight, I attempted to fly around the world, but my plane and I vanished. Who am I? *(Amelia Earhart)*
    - I worked very hard and built many airplanes before finally reaching my goal of flying across the English Channel. Who am I? *(Louis Blériot)*
    - I was the first African American woman to earn a pilot's license. I was born in Texas, but moved to France to attend flight school. Who am I? *(Bessie Coleman)*
    - I completed the first transatlantic flight in history. I flew from New York to Paris in my plane named "Spirit of St. Louis". Who am I? *(Charles Lindbergh)*
    - I built balloons and then moved on to dirigibles. Sometimes, I flew my airships to my favorite restaurant to eat dinner. I designed a single-wing plane, but gave away the plans to a popular magazine so that anyone could build their own plane. Who am I? *(Alberto Santos-Dumont)*
    - We invented the first powered flying machine. Airplanes today are still controlled by our method: roll, pitch, and yaw. Who are we? *(The Wright Brothers)*
    - After discovering that hydrogen is lighter than air and provides lift, we invented the hot-air balloon. Who are we? *(The Montgolfier Brothers)*

Class Book: Flight and the Story of Aviation

Materials: Drawing paper, drawing tools

- Tell the class or group of students that they are going to make a class book to help them remember what they have learned thus far in this unit. Have the students brainstorm important information about the following: the history of flight and aviation, Joseph and Étienne Montgolfier, Wilbur and Orville Wright, Louis Blériot, Alberto Santos-Dumont, Bessie Coleman, Charles Lindbergh, Amelia Earhart, the challenges these aviators faced, etc. Have each student choose one idea to draw a picture of, and ask them to write a caption for the picture. Bind the pages to make a book to put in the class library for students to read again and again. You may choose to add more pages upon completion of the entire unit before binding the book.

Multiple-Meaning Words Activity

Materials: Chart paper, chalkboard, or whiteboard, Flip Book Posters 1M-3M

- Throughout Lessons 1-8, you have heard several multiple-meaning words. For this activity, we will use the words *glider*, *pitch*, *inflated*, and *parachute*.
- Review with students that multiple-meaning words are exactly what they sound like. They are words that have several different definitions. Tell students that many times the definition of these words depend on how the word is used in a sentence. For example, if the word is used as a noun, it might have a different definition than if the word was used as a verb.
- For this activity, display Flip Book Posters 1M-3M, one at a time. Ask students to look at each image on the poster and to read the definitions at the bottom. Then, share a sentence with students and have them determine which meaning of the word is being used.
- You may wish to have students create sentences using these words and identifying the meaning and part of speech that has been used.

Poetry Activity

- Additional activities for "The Swing" by Robert Louis Stevenson and "The Poet and His Song" by Paul Laurence Dunbar can be found in the program's online materials. The poems themselves can be found in the Teacher Resources section of this Teacher Guide.

Research Activity

Materials: Trade books, Flip Book images, locally approved sources

- Review with students what they have already learned about the history of aviation. Remind students that aviation has come a long way since the first inventions they have learned about in this unit. Ask students to think about how these early inventions (hot air balloons, dirigibles, single-wing planes, etc.) have influenced modern aviation.
- If students have further questions about any of the inventions they have read about, you may want to provide students with an opportunity to do research. Have students research to find out how modern airplanes, helicopters, hot air balloons, etc. work and how they are still influenced by these early inventions. Ensure that all research is continuously monitored.
- You may do this research as a class or have students do their research individually. Encourage students to present their findings to a group of students or to the class.
- Make sure to reinforce unit-specific vocabulary whenever possible as students conduct their research.

- Students may use unit trade books, Flip Book images, or locally approved sources. You may also wish to partner with your campus librarian to expose students to more books and sources on flight and aviation.

Writing Prompts

- Students may be given an additional writing prompt such as the following:
  - When following a dream or goal you have, why is it important to have determination?
  - The history of aviation is important to learn about because . . .
  - The most interesting person I learned about in this unit was . . . I think this because . . .

Guest Presenter

- Invite a pilot or engineer to come to class and discuss their job.
- Have them answer questions about the type of work they do, what types of things they work on or fly, etc.

LESSON

9

FLIGHT AND THE STORY OF AVIATION

Rise to the Challenge

PRIMARY FOCUS OF LESSON

Reading

Students will make connections to ideas in other texts.

TEKS 2.6.E

Language

Students will demonstrate understanding of the Tier 2 word *accomplishment*.

TEKS 2.3.B

Writing

Students will identify primary sources of information to be used in their culminating projects.

TEKS 2.13.C; TEKS 2.13.D

FORMATIVE ASSESSMENT

Quick Write	Name a primary and secondary source of information. TEKS 2.3.B
Activity Page 2.2	What else do you wonder about Igor Sikorsky? TEKS 2.13.C

TEKS 2.6.E Make connections to personal experiences, ideas in other texts, and society; **TEKS 2.3.B** Use context within and beyond a sentence to determine the meaning of unfamiliar words; **TEKS 2.13.C** Identify and gather relevant sources and information to answer the questions; **TEKS 2.13.D** Identify primary and secondary sources.

LESSON AT A GLANCE

	Grouping	Time	Materials
Introducing the Read-Aloud (10 min.)			
Making Connections	Whole Group	10 min.	❏ Activity Page 2.2 ❏ world map or globe
Essential Background Information			
Read-Aloud (25 min.)			
Purpose for Listening	Whole Group	25 min.	❏ *Helicopter Man: Igor Sikorsky and His Amazing Invention* by Edwin Brit Wyckoff ❏ Aviation Timeline (Digital Components) ❏ Activity Page 2.2
Helicopter Man: Igor Sikorsky and His Amazing Invention			
Comprehension Questions			
Word Work: *Accomplishment*			
Application (25 min.)			
Searching for Answers	Whole Group/ Partner	25 min.	❏ Activity Pages 2.2, 4.1, 9.1 ❏ scissors for each student ❏ glue sticks for each student

ADVANCE PREPARATION

Introducing the Read-Aloud

- Prepare to group students in pairs for Think-Pair-Share.
- Students will need to reference Activity Page 2.2.

Application

- Display Activity Pages 4.1 and 9.1.
- Prepare various examples of primary and secondary sources of information, such as photographs, textbooks, encyclopedias, interviews, posters, and magazine articles. There is also an option to access the YouTube video titled "Louis Bleriot on His Cross-Channel Flight."
- Have enough scissors and glue sticks for each student.

Universal Access

- Students may reference Activity Page 2.2 throughout the lesson.

CORE VOCABULARY

accomplishment, n. something done or achieved successfully
Example: My little sister was proud of her accomplishment of learning to ride a bike.
Variation(s): accomplishments

hovered, v. flew or floated in the air without moving far in any direction
Example: The bees hovered around the hive.
Variation(s): hover

invest, v. to put out money in order to gain profit
Example: I am going to invest my allowance in my sister's lemonade stand.
Variation(s): invested, investing

rotor, n. a system of spinning horizontal blades that support a helicopter in the air
Example: The cargo helicopter has a rotor on the front and another on the back.
Variation(s): rotors

stalled, v. stopped or caused to stop usually by accident
Example: The engine on my mom's car stalled when she stopped at the stop sign.
Variation(s): stall

Vocabulary Chart for *Helicopter Man: Igor Sikorsky and His Amazing Invention*

Vocabulary Type	**Tier 3 Unit-Specific Words**	**Tier 2 General Academic Words**	**Tier 1 Everyday Speech Words**
Vocabulary	hovered rotor stalled	**accomplishment** invest	
Multiple-Meaning Vocabulary Words			
Sayings and Phrases			

Lesson 9: Rise to the Challenge

Introducing the Read-Aloud

10M

Reading: Students will make connections to ideas in other texts.

TEKS 2.6.E

MAKING CONNECTIONS (5 MIN.)

Activity Page 2.2

- Ask students to turn to Activity Page 2.2 in their Activity Book.
- Discuss with students what they have already learned about the topic of the unit.
- Have students refer to Activity Page 2.2. Ask students how the stories they have read so far are related. Talk about the different types of flying machines mentioned in the stories.
- Display the front cover of today's Read-Aloud and read the title.
- Ask students for ideas of what this story may be about.
- Model making a connection to previous Read-Alouds. Think aloud, "The cover and title of this book remind me of the story we read during the first lesson about the bamboo-copter. I wonder whether this story will be about the invention of the helicopter."
- Turn to the table of contents. Remind students that the table of contents gives an overview of what the story is about. After reading the table of contents, model it as a way to make connections to previous stories.
- Say, "In the Read-Aloud from Lesson 1, we learned that airplanes need properly curved wings to fly. I see one of the chapters is called 'Flying Without Wings.' I know helicopters do not have wings. I wonder whether this chapter will explain how helicopters fly."

TEKS 2.6.E Make connections to personal experiences, ideas in other texts, and society.

ESSENTIAL BACKGROUND INFORMATION (5 MIN.)

- Tell students that Igor Sikorsky was an engineer (a person who designs systems or structures to solve problems) and an inventor who immigrated to America from Ukraine. Point out Ukraine on a map. Note: Ukraine and Russia were at one point part of the same country, the Soviet Union, and before that, the Russian Empire.
- Explain that, just like the other aviators we have read about, Igor was determined to invent the helicopter even if it meant revising his plans many times.
- Tell students that you will read the story and see whether Igor achieves his goal.

Lesson 9: Rise to the Challenge

Read-Aloud

25M

Reading: Students will make connections to ideas in other texts.
TEKS 2.6.E

Language: Students will demonstrate understanding of the Tier 2 word *accomplishment*.
TEKS 2.3.B

PURPOSE FOR LISTENING

- Remind students to think about what they already know about aviation as they listen to the Read-Aloud.

HELICOPTER MAN: IGOR SIKORSKY AND HIS AMAZING INVENTION (15 MIN.)

- Tell students that they may refer to Activity Page 2.2 as the story is being read to connect prior knowledge to today's story.
- Read aloud *Helicopter Man: Igor Sikorsky and His Amazing Invention* by Edwin Brit Wyckoff. As you read, incorporate the following information and guided reading supports:
  - Pause after reading page 7, and ask students to share what they already know about the Wright brothers.

TEKS 2.6.E Make connections to personal experiences, ideas in other texts, and society; **TEKS 2.3.B** Use context within and beyond a sentence to determine the meaning of unfamiliar words.

Challenge

Ask students for more examples of connections with previous stories.

Support

Remind students to look at text features such as photographs, images, and graphs to better understand the events in the story.

- Ask students, "What characteristic does Igor share with the other aviators you have learned about?" *(determination)*
- On page 11, explain that *stalled* is when something stops working or running, such as an engine. Ask, "What caused Igor's engine to stall?" *(a mosquito in the fuel line)*
- On page 16, explain that *invest* means to give someone money to do or make something in the hope of making a profit. Ask, "What did Igor do with the money?" *(He made airplanes.)*
- On page 21, explain that a *rotor* is a system of spinning horizontal blades that support a helicopter in the air. Ask, "How did Igor use the rotor blades to steer his helicopter?" *(He tipped them up and down.)*
- On page 22, read the "Genius at Work" section and ask students whether it provides them with a better understanding of how a helicopter works.
- On page 24, explain that *hover* means to fly or float in the air without moving far in any direction. Ask students whether they can think of other things that hover.
- On page 27, explain that an *accomplishment* is something done or achieved successfully. Invite students to share their accomplishments.
- After reading, discuss with students how making connections between the information in the text and what they have already learned helps them understand and remember what they have read.
- Ask a volunteer to point out Igor Sikorsky on the Aviation Timeline. *(May 13, 1940)*

COMPREHENSION QUESTIONS (5 MIN.)

1. **Literal.** How did a mosquito lead Igor to design airplanes with more than one engine? *(He realized that, after the mosquito caused his engine to stop working, he would not have crashed if he had had another engine to use.)*
2. **Evaluative.** Why did Igor think the greatest danger in aviation was starvation? *(because there are many failures and few successes)*
3. **Literal.** Name some ways helicopters are used today. *(Answers may vary.)*
4. **Inferential.** Why do you think Igor kept on inventing even though he experienced so many setbacks? *(Answers may vary but should include that he had determination and curiosity.)*
5. **Inferential.** Why do you think Igor immigrated to the United States? *(Answers may vary but should include that America provided opportunity for someone to pursue their dreams by starting a business without interference from the government.)*

WORD WORK: ACCOMPLISHMENT (5 MIN.)

1. In the story, you heard a sentence about the helicopter invention being Igor Sikorsky's greatest accomplishment.
2. Say *accomplishment* with me.
3. An *accomplishment* is something done or achieved successfully. Igor Sikorsky invented many types of aircraft, but the invention of the helicopter was his greatest accomplishment.
4. What are some words you heard in the sentence that help you understand what accomplishment means? *(greatest, invention of the helicopter)*
5. What is the word we have been talking about?

Use a Turn and Talk activity for follow-up. Turn to a partner and talk about an accomplishment you are proud of. Explain why you are proud of it and how you achieved it.

Challenge

Ask students to think of the people they have learned about in this unit and explain one of their accomplishments.

Support

Ask students to draw a picture of an accomplishment that they heard about in the reading. Use the Word Work discussion to have students identify context clues in the text before drawing their pictures.

Lesson 9: Rise to the Challenge

Application

25M

Writing: Students will identify primary and secondary sources of information to be used in their culminating projects.

TEKS 2.13.C; TEKS 2.13.D

SEARCHING FOR ANSWERS (25 MIN.)

- Review the research plan using the class copy of Activity Page 4.1. Ask students to name some of the sources of information that were identified in step 2.
- Introduce the concept of primary and secondary sources by playing a quick telephone game: Write a message on a piece of paper, and then whisper it to a student.
- Have students continue whispering the message to each other until the last student states the message out loud.
- Compare what was written on the piece of paper to what was said by the last student.
- Explain that by the time the message gets back to the original person, the information has usually changed—sometimes drastically.
- Explain how information changes from its original form as it gets passed around. Ask students why they think it would be important to use the first source of information. What could happen if they use information from someone further down the line?
- Explain that there are two types of sources: *primary* and *secondary* sources. Write *primary* and *secondary* on the board or chart paper.
- Ask, "What do you know about the word *primary*?"
- Write appropriate responses under *primary*.
- Direct students' attention to the word *secondary* on the board, and ask, "What do you know about the word *secondary*?"
- Explain that primary sources are documents that give firsthand accounts or testimonies from direct witnesses. Some examples are diaries and photographs. Ask students to brainstorm other ideas for primary resources, such as letters, newspaper articles, and videos or recordings of interviews.

EMERGENT BILINGUAL STUDENTS

Application

Beginning
Provide pictures of specific examples of primary and secondary sources of information for students to add to their charts to monitor understanding of spoken language during the lesson. Ask students to point out examples of primary and secondary sources.

Intermediate
Students may work with a partner to complete Activity Page 9.1 to monitor understanding of spoken language during lesson. Ask students to describe primary and secondary sources.

Advanced/Advanced High
After completing Activity Page 9.1, ask students to orally explain and give examples of primary and secondary sources to monitor understanding of spoken language during lesson.

ELPS 2.D; ELPS 3.H; ELPS 5.F; ELPS 2.F

TEKS 2.13.C Identify and gather relevant sources and information to answer the questions; **TEKS 2.13.D** Identify primary and secondary sources.

- Explain that a secondary source is written by someone who has looked at and evaluated (developed an informed opinion about) a primary source. Secondary sources describe facts and information.
- Ask: Is the informational text about the Tuskegee Airmen is a primary source or a secondary source? *(secondary)*. In the informational text, there is a quote from President Truman's Executive Order 9981. Is text from that Executive Order a primary source or a secondary source? *(primary)*
- Tell students that they should look for secondary sources written by experts. Teachers will curate a list of locally approved resources that have been vetted by the school district and librarian. Students may also use library books and textbooks that are carefully vetted by the school district and teacher.
- Ask students to think of other reliable secondary sources, and write those on the board.
- Check for understanding by holding up previously prepared primary and secondary sources. Ask students to raise one finger if they think the source is a primary source. Ask them to raise two fingers if they think the source is a secondary source.
- Direct students' attention to Activity Page 9.1. Ask them to write the definition of *primary source* and *secondary source* in their own words in the two boxes at the top. Then, have them cut the sources on the second page apart and glue them into the correct place on the chart.
- To finish up the Application section of this lesson, take a few minutes to ask students to share some ideas of primary and secondary sources they could use for their culminating task.

Quick Write

- Name a primary and secondary source of information. **TEKS 2.13.D**
- Writing: Activity Page 2.2: What else do you wonder about the Tuskegee Airmen? **TEKS 2.13.C**
- Have students complete Activity Page 2.2 for this lesson. Also, have them list any resources they could use to answer their questions.

End Lesson

TEKS 2.13.D Identify primary and secondary sources; **TEKS 2.13.C** Identify and gather relevant sources and information to answer the questions.

Support

Give students a list of primary and secondary sources, and have them work with a partner to cut out and place sources in the correct category.

Challenge

Have students think of more examples of primary and secondary sources.

Activity Page 9.1

LESSON

10

FLIGHT AND THE STORY OF AVIATION

Heroes

PRIMARY FOCUS OF LESSON

Reading

Students will discuss the author's purpose for writing the text.

TEKS 2.10.A

Language

Students will demonstrate understanding of the Tier 2 word *vulnerable*.

TEKS 2.3.B

Writing

Students will identify and gather relevant information about aviators and their contributions to aviation.

TEKS 2.13.C

FORMATIVE ASSESSMENT

Quick Write	What else do you wonder about the Tuskegee Airmen? TEKS 2.13.C
Activity Page 2.2	Record information about the Tuskegee Airmen and their contributions to the world of aviation. TEKS 2.13.C

TEKS 2.10.A Discuss the author's purpose for writing text; **TEKS 2.3.B** Use context within and beyond a sentence to determine the meaning of unfamiliar words; **TEKS 2.13.C** Identify and gather relevant sources and information to answer the questions.

LESSON AT A GLANCE

	Grouping	Time	Materials
Introducing the Read-Aloud (10 min.)			
Making Connections	Whole Group	10 min.	❏ Activity Page 2.2 ❏ world map or globe
Essential Background Information			
Read-Aloud (25 min.)			
Purpose for Listening	Whole Group	25 min.	❏ Aviation Timeline (Digital Components) ❏ Activity Page 2.2 ❏ Flipbook 10A-1-10A-7 ❏ Image Cards 1
Read-Aloud: "Tuskegee Airmen"			
Comprehension Questions			
Word Work: *Vulnerable*			
Application (25 min.)			
Organizing Information	Whole Group/ Independent	25 min.	❏ Activity Pages 2.2, 4.1, 10.1 ❏ Aviation Graphic Organizer (Digital Components)

ADVANCE PREPARATION

Introducing the Read-Aloud

- Prepare to project the Read-Alouds from Lessons 2 and 6.
- Prepare to group students in small groups of four or five.
- Students will need to reference Activity Page 2.2.
- Prepare to display Image Card 1 for reference during the Read-Aloud.
- Prepare to display the Aviation Timeline (Digital Components).

Application

- Prepare to choose an aviator to use for modeling how to identify a resource and find information to answer research questions.
- Display Activity Pages 4.1 and 10.1.
- Group students in pairs to work together at various times during the Application activity.
- Prepare resources that students can use for their research, such as website addresses for school-permitted search engines, trade books from the unit, examples of primary and secondary sources, and additional books from the school library.

Universal Access

- Students may reference Activity Page 2.2 throughout the lesson.

CORE VOCABULARY

Airman, n. a pilot and a member of the crew in the Air Force; a specific rank in the Air Force
Example: My uncle was an Airman in the Air Force during the Vietnam War.
Variation(s): airmen

missions, n. an important assignments, often associated with those in the military, to perform a specific task
Example: The pilots completed many missions behind enemy lines.
Variation(s): mission

escorted, v. accompanied a person or group to give protection or show courtesy
Example: The police escorted the president's car to the airport.
Variation(s): escort, escorting

vulnerable, adj. weak or without protection
Example: The baby bird was vulnerable to the weather and predators.
Variation(s): none

Vocabulary Chart for "Tuskegee Airmen"

Vocabulary Type	**Tier 3 Unit-Specific Words**	**Tier 2 General Academic Words**	**Tier 1 Everyday Words**
Vocabulary	Airman missions (misiones)	vulnerable (vulnerable) escorted	
Multiple-Meaning Vocabulary Words			
Sayings and Phrases			

Lesson 10: Heroes

Introducing the Read-Aloud

10M

Reading: Students will discuss the author's purpose for writing the text.

TEKS 2.10.A

MAKING CONNECTIONS (5 MIN.)

Activity Page 2.2

- Ask students to find Activity Page 2.2 in their Activity Book.
- Discuss what students have already learned in this unit. Have them refer to Activity Page 2.2.
- Say, "Raise your hand if you know something about the Tuskegee [/Tuh*skee*gee/] Airmen. For those who may not be familiar, what do you think 'The Tuskegee Airmen' could be about?" Have students share their answers with a partner.
- Explain that authors have a purpose, or reason, for writing. Write the words *inform*, *entertain*, and *persuade* on the board or chart paper.
- Explain that *inform* means to give information to the reader, *entertain* means to amuse the reader, and *persuade* means to try to convince the reader to think the same way the author does.
- Model identifying the author's purpose for previous Read-Alouds.
  - Feel free to use the Read-Alouds from Lessons 2 and 6.
- Explain that students can figure out the author's purpose by the effect the book has on them. Point out that the author can have more than one purpose.
- Review with students the Read-Aloud from Lesson 2, *Up and Away!: How Two Brothers Invented the Hot-Air Balloon*.
- Have students work in groups of four to five to discuss the author's purpose for the book.
- Invite groups to share their interpretation of the author's purpose with the rest of the class.

TEKS 2.10.A Discuss the author's purpose for writing text.

ESSENTIAL BACKGROUND INFORMATION (5 MIN.)

- Explain that aviators in this story are called the Tuskegee Airmen because they trained in Tuskegee, Alabama. Point out the location on a map.
- Explain that the Tuskegee Airmen formed a military unit of pilots, ground crew, and support staff called the 332nd Fighter Group. They were a famous group of fighter pilots that fought during World War II.
- Explain that World War II happened over 80 years ago, before even their grandparents were born. Ask a volunteer to point to the Tuskegee Airmen on the Aviation Timeline.
- Explain that during World War II, the United States was joined by Britain and several other countries to form the Allies. They fought against the Axis, that included Germany, Italy, and Japan. During the war, Germany was run by an evil group of people called the Nazis, who fought against freedom. In World War II, America was fighting to preserve freedom.
- Explain that the Tuskegee Airmen helped America win the war and helped freedom triumph. But they didn't just help defeat the evil Nazis in Germany. They also helped make America a better place, playing a key role to help launch the Civil Rights Movement. Remind students that they learned about the Civil Rights Movement in the previous unit, *Fighting for a Cause*.
- Explain that the Tuskegee Airmen flew missions in Italy and Germany.
- Use the map to point out where Italy, North Africa, and Germany are, and explain that major battles of World War II were fought in all three places. Point out where Italy is in relation to Germany. Note how far this is from America, and, specifically, Tuskegee, Alabama.

Lesson 10: Heroes

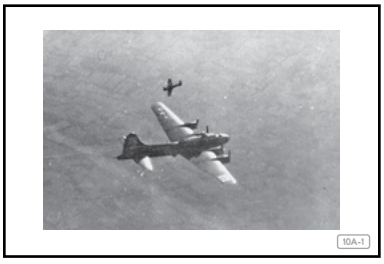
Read-Aloud

25M

Reading: Students will discuss the author's purpose for writing the text.
TEKS 2.10.A

Language: Students will demonstrate understanding of the Tier 2 word *vulnerable*.
TEKS 2.3.B

READ-ALOUD: "TUSKEGEE AIRMEN" (15 MIN.)



Show Image 10A-1: B-17

It was March 24, 1945, during World War II. The 332nd Fighter Group of the US Army Air Corps, known as the Tuskegee Airmen, were flying into combat. They were flying an **escort** mission, flying alongside other planes to protect them from attack. They were escorting heavy bombers, B-17s, large airplanes that were designed to fly long distances and drop bombs on the enemy. But those heavy bombers were slow and **vulnerable**, and if enemy fighter planes were in the area, the enemy fighters could easily shoot down the bombers before they were able to hit their targets. *Ask: "Why would it be important to have fighter planes escort the heavy bombers?" (Answers should include: without fighter escorts, the bombers would be easily shot down by enemy fights, because the bombers were slow.)*

The American pilots were deep into Nazi German territory. The mission was to get those giant B-17's to bomb a tank assembly plant near Berlin, and then get back home safely. It was the only way America was going to win the war and defeat the evil Nazis. But it was dangerous. The **mission** involved flying 1,600 miles from Italy to Germany and back. The entire time they were over Germany, heavy anti-aircraft guns fired from below. German fighter planes would do everything they could to shoot down the American bombers.

Support

Explain to students that an Airman is someone who has joined the U.S. Air Force. It is also a rank in the U.S. Air Force. Not all Airmen are pilots. Some may be other types of aviators, such as navigators or technicians. An Airman can be a man or a woman.

Support

Reread the definition of the word *vulnerable*.

TEKS 2.10.A Discuss the author's purpose for writing text; **TEKS 2.3.B** Use context within and beyond a sentence to determine the meaning of unfamiliar words.

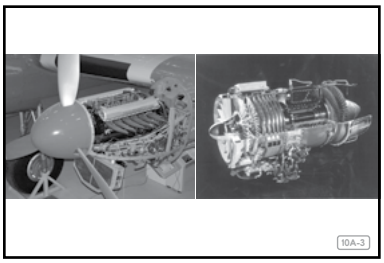
Check for Understanding

What countries were fighting against each other in World War II? (Answers should include America and the Allies, including England/Great Britain on one side, vs. Germany, Italy, and Japan, the Axis, on the other.) What country were the Tuskegee Airmen part of? (America)

Show Image 10A-2: Red Tail Plane

But on this day, for this dangerous mission, the Tuskegee Airmen were flying. They were flying fighter planes, alongside the bombers. Their planes were P-51 Mustangs, painted with red tails, so that everyone would know it was them. They were the best of the best. Throughout the war, almost no bombers ever got shot down when the Tuskegee Airmen escorted them. Enemy German pilots knew just how good they were, calling them *Schwarze Vogelmenschen*, or "Black Birdmen," as a term of respect. Their commanding officer, Lt. Colonel Benjamin Davis, Jr., named his plane "By Request" because so many American bomber pilots requested the Tuskegee Airmen to escort them. Why would so many American bomber pilots request to be escorted by the Tuskegee Airman? *(Because when Tuskegee Airmen escorted American bombers, the bombers almost never got shot down, so the bomber pilots knew they were safer; emphasize the new vocabulary word, they were less* ***vulnerable****.)*

This day would test them like never before. The B-17 bombers and P-51 Mustang fighter planes were planes from the first generation of aviation. They were powered by propellers. They were certainly powerful for their time — the P-51s could fly at a top speed of 440 miles per hour. But propeller planes are slower than jet aircraft. Unfortunately, Nazi Germany had invented jet aircraft before the Americans.



Show Image 10A-3: Jet Engine

The Germans flew a jet called the Me-262. It wasn't powered by a propeller. It used a jet engine. There are big differences. A propeller cuts through open air. It generates thrust by the curve of the propeller blades pushing the open air backward. In contrast, a jet engine compresses air, shooting it out a small opening in the back at high speed. Jet engines can help aircraft go much faster, and the Germans had figured out how to make them. The Me-262 jets could fly at a top speed of 540 miles per hour, so much faster than the P-51s it would make it seem like the American planes were standing still.

Check for Understanding

Earlier in this unit, we read about who invented the first airplane. Who invented the first airplane? (The Wright Brothers) Did they invent a propeller plane or a jet airplane? *(propeller plane)* Show Image Card 1, and note the propeller in the image. Are jets a little bit faster than propeller planes or a lot faster than propeller planes? *(Jets are a lot faster.)*

To make matters worse, the Red Tails had been flying a very long mission already and were supposed to be relieved by other fighter planes with more fuel. But the relief planes never showed up. For these men, though, failure was never an option. Tuskegee Airmen were brave. They refused to turn back. Instead, they would stay with the B-17s all the way to the target, even if they ran out of fuel and had to crash land before they got back.

Show Image 10A-4: The Tuskegee Airmen

The Tuskegee Airman weren't just brave. They were incredibly skilled. They had gone through intense training, years before back in America. During flight school, there were hard classes, requiring constant study. If they failed too many tests, they were kicked out of the program. And then there was the flight training itself. During flight training, two men would go into the plane: the cadet, the person who was training to be a pilot, and the instructor, the person doing the teaching. The cadet had to do exactly what the instructor ordered. They would fly up 10,000 feet, perform loops, do slow rolls, dive, and many other skills. Throughout the training flights, the instructor would take note of any errors, no matter how small. If a cadet made too many errors on a flight, the cadet got a pink slip. Three pink slips, and the cadet was dropped from the flight program. The first class began with thirteen cadets, but only five earned their wings, officially becoming pilots. The Tuskegee Airmen were only the best. Why do you think their training was so strict? *(Answers may vary but should include that the training had to be strict to ensure they would be successful in combat.)* Do you think if assignments in our school were this difficult that you would be more prepared later in life? *(Answers may vary.)*

Show Image 10A-5: Me-262

On that day in 1945, as the American bombers and fighters approached the tank factory near Berlin, several German Me-262 jet fighters showed up. There was an intense dogfight. The pilots looped. They swooped. They climbed. They dived. The American P-51s were clearly slower than the German Me-262s, but inside those P-51s weren't just any pilots. They were Tuskegee Airmen. Before long, the Red Tails shot down three German jets, even though the Americans had slower planes. As a result, the bombers all made it to their targets successfully and turned around for the long flight back to Italy. What does successfully mean? *(to end well, the mission worked, it achieved its objectives)*

Even then, the day wasn't over. The American fighters barely had enough fuel for the trip. If they ran out of fuel before they got back to the airfield in Italy, the pilots would have to crash land. Tuskegee Airmen were used to this problem. In fact, the competitive pilots would brag about who had the least amount of fuel when they landed. They formed the "Three Minute Egg Club" for those pilots who landed with less than three minutes of fuel remaining. These men were used to close calls. If they only had three minutes of fuel remaining when they landed, what would happen if their mission took 4 minutes longer? *(They would run out of fuel while flying, and would have to crash land.)*

Over the course of the war, the Tuskegee Airmen flew over 1,500 combat missions. They destroyed over a hundred enemy aircraft in dogfights and hundreds more on the ground. They also helped destroy nearly a thousand rail cars and vehicles, which made it harder for Germany to move equipment. Throughout all of this, the Tuskegee Airmen suffered only minimal losses. This made them one of the best fighting forces in the war.

Show Image 10A-6: Tuskegee Army Airfield

But all of this bravery and skill in combat almost never happened. At this time in America, there were many laws throughout the country that enforced racial segregation, unlike today. Before World War II, African Americans were not allowed to be pilots in the Army. But there were many people in the Army and in America that disagreed with these laws. As World War II began, laws were passed to allow the highly respected Tuskegee Institute, a college for African Americans, to establish a flight school in Tuskegee, Alabama. From here, the Tuskegee Airmen were trained,and eventually, sent into battle to serve their country. *Point to Tuskegee, Alabama on a map.*

Show Image 10A-7: President Truman desegregated the military

Their excellent performance in World War II helped win the war, but it also helped change America. The Tuskegee Airmen inspired President Truman to issue an executive order after the war prohibiting segregation and discrimination in the military. In Executive Order number 9981, Truman wrote: "It is hereby declared to be the policy of the President that there shall be equality of treatment and opportunity for all persons in the armed services without regard to race, color, religion or national origin." Now all Americans could serve their country together, regardless of race. It became an important change that helped lead to the Civil Rights Movement.

After World War II ended, the Tuskegee Airmen continued to grow in size and popularity. They once again served with honor during the Korean War in the early 1950s. When the war ended, many of the Tuskegee Airmen came home and continued to serve their country and communities in other ways, like becoming doctors, lawyers, and other professionals in civilian life.

The Tuskegee Airmen volunteered to fight for our country and made huge sacrifices for America. They became one of the greatest fighter groups in U.S. history. They showed us that in our country, no matter our background, with determination and hard work, we can do whatever we set our minds to.

Check for Understanding

Is this a true story? (yes) We learned about segregation in the previous unit: *Fighting for a Cause*. What is segregation? *(a practice under law of keeping people separate because of their race)* When was segregation ended in the U.S. military? *(President Truman issued an order prohibiting it after the end of World War II.)*

COMPREHENSION QUESTIONS (5 MIN.)

1. **Literal.** What war did the Tuskegee Airmen serve in? *(World War II)*
2. **Literal.** How did the Tuskegee Airmen prepare to become successful pilots? *(Answers may vary but should come from the text and include the fact that they trained very hard during flight school, and if they made too many mistakes flying or failed too many tests, they weren't allowed to be pilots.)*
3. **Inferential.** Think-Pair-Share. Why are jet engine airplanes faster than propeller airplanes? *(Answers may vary but should include that jet engines compress air through a small opening, and because of that, the air moves much faster than a propeller, which pushes open air.)*
4. **Evaluative.** Think-Pair-Share. What purpose did the author have in writing this informational text? *(Answers may vary but should include that the author wanted to persuade the reader that the Tuskegee Airmen were very good pilots, very important to the American victory in World War II, and important in ending segregation in the United States military.)*

WORD WORK: VULNERABLE (5 MIN.)

1. In the story, you heard the sentence, "But those heavy bombers were slow and vulnerable, and if enemy fighter planes were in the area, the enemy fighters could easily shoot down the bombers before they were able to hit their targets."
2. Say *vulnerable* with me.
3. When someone or something is vulnerable, it is weak or without protection.
4. The group was vulnerable during the thunderstorm because they did not have an umbrella.
5. Think of a time a person or animal might be *vulnerable*. Share your thoughts with a partner.
6. What is the word we have been talking about?

Challenge

For question #3, students can reproduce this effect to understand the physics involved. The teacher would model for the students to reproduce.

Take your hands and put them in front of your mouth, with your mouth wide open, and breath out on your hands as if you are trying to warm them. Feel how much force hits your hands. This is similar to propellers pushing open air. Then, try again, but this time purse your lips and breathe out. You can feel how much faster your breath hits your hands when the opening is narrower, just like the jet out of the back of a jet engine.

Lesson 10: Heroes

Application

25M

Writing: Students will identify and gather relevant information about aviators and their contributions to aviation.

TEKS 2.13.C

ORGANIZING INFORMATION (25 MIN.)

Activity Pages 2.2, 4.1, and 10.1

- Review the Research Plan using the class copy of Activity Page 4.1.
- Tell students that they are going to use the information they have learned about finding resources to continue answering their questions about aviation.
- Explain that they are going to choose three aviators (or a group of aviators) to focus on for their culminating task. They will begin identifying and organizing their information for one of the aviators today using a graphic organizer.
- Give them a few minutes to review Activity Page 2.2, the class timeline, and any other resource materials.
- Have them circle one of the aviators that they are going to focus on today on Activity Page 2.2.
- Tell students to find Activity Page 4.1 in their Activity Book. Project the class copy of Activity Page 4.1, and review with students some of the sources of information that were identified as a class.
- Direct students to find Activity Page 2.2 and review the questions and topics they have written down for their chosen aviators.
- Direct students' attention to Activity Page 4.1 again. Ask students which steps have been completed and which step is next. Explain that they will be moving on to step 3 of the Research Plan.
- Direct students to find Activity Page 10.1 in their Activity Book. Explain that they will use this page to help them organize their research about their chosen aviator.
- Project a class copy of Activity Page 10.1. Complete this copy as a class to model for students how to organize their research information. Choose an aviator/aviators to model, and write the name(s) on the line.

TEKS 2.13.C Identify and gather relevant sources and information to answer the questions.

- Model identifying a resource and finding information to answer the first question.
- Next, ask a student to read question 2. Ask students to identify a resource they could use to find the answer. Work together to use the resource to find the information that answers the question. Repeat the same procedure with questions 3 and 4.
- Allow students to work in pairs to complete their graphic organizers with their chosen aviator(s) using the information they have recorded on Activity Page 2.2. If students find it necessary to supplement the information that they have researched in previous lessons, allow them to use the resources to do so.
- After students have had a chance to find information to answer their questions, invite several volunteers to share their questions with the class and the answers they found.

Quick Write

- What else do you wonder about the Tuskegee Airmen? **TEKS 2.13.C**
- Have students complete Activity Page 2.2 for this lesson. Also, have them list any resources they could use to answer their questions.

End Lesson

Support

Provide 1:1 support to students to help them find answers to their questions.

Challenge

Have students use primary and secondary resources to answer their questions.

EMERGENT BILINGUAL STUDENTS

Application

Beginning
Group students in pairs to find answers to research questions.

Intermediate
Have students answer research questions using key words and phrases while spelling them with increased accuracy.

Advanced/Advanced High
Have students answer research questions using complete sentences with increased accuracy spelling familiar English words.

ELPS 2.E; ELPS 4.D; ELPS 5.C

TEKS 2.13.C Identify and gather relevant sources and information to answer the questions.

LESSON

11

FLIGHT AND THE STORY OF AVIATION

Tinker, and Tinker Some More

PRIMARY FOCUS OF LESSON

Reading

Students will ask and answer questions about key details in the text.

TEKS 2.1.A

Language

Students will discuss how the text structure contributes to the author's purpose.

TEKS 2.10.B

Writing

Students will find answers to research questions about aviators and their contributions to aviation.

TEKS 2.13.C

FORMATIVE ASSESSMENT

Quick Write	If you had the opportunity to meet Beatrice Shilling, what would you ask her? TEKS 2.13.A
Activity Page 2.2	What else do you wonder about Beatrice Shilling? Where can you find the answers? TEKS 2.13.A; TEKS 2.13.C

TEKS 2.1.A Listen actively, ask relevant questions to clarify information, and answer questions using multi-word responses; **TEKS 2.10.B** Discuss how the use of text structure contributes to the author's purpose; **TEKS 2.13.C** Identify and gather relevant sources and information to answer the questions; **TEKS 2.13.A** Generate questions for formal and informal inquiry with adult assistance.

LESSON AT A GLANCE

	Grouping	Time	Materials
Introducing the Read-Aloud (10 min.)			
What Have We Already Learned?	Whole Group	10 min.	❏ Activity Page 2.2 ❏ world map
Essential Background Information			
Read-Aloud (25 min.)			
Purpose for Listening	Whole Group	25 min.	❏ *The Girl Who Could Fix Anything: Beatrice Shilling, World War II Engineer* by Mara Rockliff ❏ Activity Page 3.1 ❏ Question Starters (Digital Components)
The Girl Who Could Fix Anything: Beatrice Shilling, World War II Engineer			
Comprehension Questions			
Author's Purpose and Craft			
Application (25 min.)			
Organizing Information	Whole Group/ Independent/ Partner	25 min.	❏ Activity Pages 2.2, 10.1, 11.1

ADVANCE PREPARATION

Introducing the Read-Aloud

- Students will need Activity Page 2.2 for review.
- Display a world map or a globe.
- Prepare to group students in pairs for Think-Pair-Share.

Read-Aloud

- Prepare to display Question Starters (Digital Components).
- Prepare to display the chart below (Activity Page 3.1).

Who, What, When, Where, Why, and How (Digital Components)

Who, What, When, Where, Why, and How Create a question about the text using Who, What, When, Where, Why, and How. For example: Who invented the world's first powered airplane?	
Who?	
What?	
When?	
Where?	
Why?	
How?	

- Prepare to read aloud the trade book *The Girl Who Could Fix Anything: Beatrice Shilling, World War II Engineer* by Mara Rockliff. While previewing the book, add page numbers, and reference the guided reading supports included in this lesson. This trade book does not have numbered pages, but for ease of use, there are references to page numbers in the materials. The book begins with page 1, which has no text, only illustrations. Page 2 starts with "Beatrice Shilling wasn't quite ...", and the pages are numbered in order after that, and ends on page 36.

Application

- Prepare a research question that you will use for modeling how to identify a resource and find information to answer your question.
- Display class copies of Activity Pages 4.1 and 10.1.
- Group students in pairs to work together at various times during the Application activity.
- Prepare resources that students can use for their research, such as website addresses for locally approved sources, trade books from the unit, examples of primary and secondary sources, additional books from the school library, etc.

Universal Access

- Students may refer to Activity Page 2.2.
- Prepare examples of question frames to use during the Application segment, such as "When should . . .?" or "How could . . .?"

CORE VOCABULARY

apprentice, n. a person who is learning to do a job by working alongside someone else who is skilled at that job
Example: My brother was an apprentice to an experienced plumber before opening his own plumbing business.
Variation(s): none

engineer, n. a person who designs systems or structures to solve problems
Example: The engineer designed a plane that could fly even faster and higher in the sky than old planes.
Variation(s): engineers

fuel, n. a substance that is burned to create energy to power something
Example: We had to stop at the gas station because our car was almost out of fuel.
Variation(s): none

sputtered, v. made a series of quick, explosive sounds
Examples: When we ran out of gas, the engine sputtered.
Variation(s): sputter, sputters

tinkered, v. tried to repair or improve something by playing around with it
Example: She tinkered with the engine until she got it to run again.
Variation(s): tinker, tinkers

Vocabulary Chart for "Tinker, and Tinker Some More"

Type	Tier 3 Unit-Specific Words	Tier 2 General Academic Words	Tier 1 Everyday Speech Words
Vocabulary	apprentice *(aprendiz)*	engineer *(ingeniero/a)* sputtered tinkered	fuel
Multiple-Meaning Vocabulary Words			
Sayings and Phrases			

Lesson 11: Tinker, and Tinker Some More

Introducing the Read-Aloud

10M

Reading: Students will ask and answer questions about key details in the text.

TEKS 2.1.A

Activity Page 2.2

WHAT HAVE WE ALREADY LEARNED? (5 MIN.)

- Say, "We have been reading lots of stories in the past week. What are some of the stories we have read?"
- Direct students to Activity Page 2.2. Ask them to review the questions they have recorded and to think whether any of the questions have been answered from the stories that they have read so far. Explain that one way in which we can find answers to our questions is to look for them in books. Tell them that books are a type of resource.
- Ask two or three volunteers to share any questions that may have been answered.
- Ask, "What characteristic do all the aviators share in those stories?" *(determination)*
- Explain that all the aviators they have read about so far have something in common besides determination. Ask if they can think of what it is. *(Guide students to realize that all aviators must be passionate about learning new information and be willing to take risks.)* Ask students to turn and talk to a partner about what might be required of someone who wants to become an aviator. Ask volunteers to share some of their thoughts with the class.

ESSENTIAL BACKGROUND INFORMATION (5 MIN.)

- Tell students that today they are going to read a story about a woman named Beatrice Shilling. She was from England. Point out the place on a map.
- Explain that, like all the other aviators we have learned about, she has a lot of determination. However, she is not an aviator. She was an engineer who worked on airplane engines.
- Explain that, like the Tuskegee Airmen, Beatrice played a big role in helping the Allies win in World War II.
- Tell students that as today's story is read, they should think about questions they would want to ask Beatrice.

TEKS 2.1.A Listen actively, ask relevant questions to clarify information, and answer questions using multi-word responses.

Lesson 11: Tinker, and Tinker Some More

Read-Aloud

25M

Reading: Students will ask and answer questions about key details in the text.
TEKS 2.1.A

Language: Students will discuss how the text structure contributes to the author's purpose.
TEKS 2.10.B

PURPOSE FOR LISTENING

- Project Activity Page 3.1, and remind students to think about questions they can create using the question words on the activity page.

THE GIRL WHO COULD FIX ANYTHING: BEATRICE SHILLING, WORLD WAR II ENGINEER (15 MIN.)

- Read aloud *The Girl Who Could Fix Anything: Beatrice Shilling, World War II Engineer* by Mara Rockliff. As you read, incorporate the following information and guided reading supports:
  - On page 5, explain that an *engineer* is a person who designs, builds, and maintains machines. Beatrice was going to be an apprentice engineer. Explain that an *apprentice* is a person who is learning to do a job by working alongside someone else who is skilled at that job.
  - On page 9, explain that the word *tinkered* means trying to repair or improve something by playing around with it. Beatrice tinkered with her motorcycle in her spare time. Ask, "Why do you think she tinkered with her motorcycle?"
  - After reading page 11, ask, "How did the author organize this story?" *(It is told in chronological order.)* Point out the phrase, "By the time Beatrice left the University." Tell students that authors use clue words and phrases that let us know that time is passing in the story. Ask, "What did Beatrice do before she went to University?" *(She met Miss Partridge and was an apprentice engineer.)*
  - Pause after reading page 19. Ask: "What word or phrase on this page tells us that the story is being told chronologically or in "time order"? *(the next year)*

Challenge

Have students brainstorm a list of jobs that engineers could have or types of projects they could work on.

TEKS 2.1.A Listen actively, ask relevant questions to clarify information, and answer questions using multi-word responses; **TEKS 2.10.B** Discuss how the use of text structure contributes to the author's purpose.

- Pause after reading page 20, and ask students to use any of the key details in the text to create questions. If students need additional help creating questions, model several examples. *(What is the problem nobody can solve? Who will solve the problem?)* Ask two or three volunteers to share their questions. Write these examples on the class copy of Activity Page 3.1.
- After reading the second paragraph on page 21, review the meaning of *sputter* from Lesson 4 about Louis Bleriot's airplane. Point out the words "put, put, put" in the illustration on page 22. Explain that this is the sound the engine made when it sputtered out.
- At the end of page 21, explain that *fuel* is a substance that is burned to create energy to power something such as an airplane. The type of fuel burned by planes is gasoline.
- After reading, ask students to think of questions for each of the remaining question words on Activity Page 3.1.

COMPREHENSION QUESTIONS (5 MIN.)

1. **Literal.** What did Beatrice like to do with tools? *(make things, fix things, and take things apart)*
2. **Literal.** What happened to British aircraft engines when British planes had to dive suddenly? *(They would sputter and sometimes stop completely.)*
3. **Inferential.** The book said that when this problem started occurring, the source of the trouble seemed clear: not enough fuel was getting to the engine. Why would not enough fuel getting to the engine seem like the obvious cause of this problem? *(Answers may vary but may include that engines need gasoline to work, and without them, they sputter.)*
   Follow Up: Even though this seemed obvious, what did Beatrice discover was the actual cause of the problem? *(too much fuel got to the engine after a dive)*
4. **Literal.** How did Beatrice help the Royal Air Force during World War II? *(She found the solution to the problem with the planes and invented a part to fix them.)*

AUTHOR'S PURPOSE AND CRAFT (5 MIN.)

- Remind students that the author uses clue words or phrases to show us that the story is being told in chronological order.
- Explain that chronological order is events happening from beginning to end. Remember that the events are listed in the order that they happen. Authors use dates, phrases, or words to show that time has passed. For example,

Support

Ask students to draw a picture of one of the details from the story.

"She was born in 1990. She began walking at 1 year old. As she grew older, she began exploring her interest in sports."

- Tell students to think of the things they learned about Beatrice Shilling from the Read-Aloud. Call on several students to share what they learned. Once a list is created, call on several other students to put those events in order.
- Ask students why they think the author chose to tell this story in chronological order. *(Answers may vary but could include that this is a story of Beatrice Shilling's life, so chronological order is a good way to share all of that information.)*

Challenge

Have students write a chronological account of their life.

Support

Work with students to identify examples of clue words and phrases that tell them the story is told in chronological order.

Lesson 11: Tinker, and Tinker Some More

Application

25M

Writing: Students will find answers to research questions about aviators and their contributions to aviation.

TEKS 2.13.C

ORGANIZING INFORMATION (25 MIN.)

- Follow the same procedure as Lesson 10 Application for modeling and partner work.
- Direct students to turn to Activity Page 11.1 in their Activity Book. Explain that they will use this page to help them organize their research about their second chosen aviator. Project the class copy of Activity Page 10.1. Review this copy with the class.
- Have students work in pairs to complete their graphic organizers with their second chosen aviator using the information they have recorded on Activity Page 2.2. If students find it necessary to supplement the information that they have researched in previous lessons, allow them to use the resources to do so. Ensure all research regarding the internet is monitored at all times.
- After students have had a chance to find information to answer their questions, invite several volunteers to share their questions and the answers they found with the class.

Activity Page 11.1

Challenge

Have students use primary and secondary sources to answer their questions.

Support

Work individually with students to help them find answers to their questions.

TEKS 2.13.C Identify and gather relevant sources and information to answer the questions.

Quick Write

- If you had the opportunity to meet Beatrice Shilling, what questions would you ask her? **TEKS 2.13.A**
- Writing: Activity Page 2.2: What else do you wonder about Beatrice Shilling? Where can you find the answers? **TEKS 2.13.A; TEKS 2.13.C**
- Have students complete Activity Page 2.2 for this lesson. Have them list any resources they could use to answer their questions, such as the Read-Aloud or other locally approved sources.

End Lesson

EMERGENT BILINGUAL STUDENTS

Application

Beginning
Group students in pairs to orally answer the research questions using sentence starters.

Intermediate
Have students orally answer research questions using one or two sentences using sentence starters.

Advanced/Advanced High
Have students write and explain their answers to their research questions using a variety of complete sources.

ELPS 3.H; ELPS 4.E; ELPS 5.F

TEKS 2.13.A Generate questions for formal and informal inquiry with adult assistance; **TEKS 2.13.C** Identify and gather relevant sources and information to answer the questions.

LESSON

12

FLIGHT AND THE STORY OF AVIATION

Aim for the Skies

PRIMARY FOCUS OF LESSON

Reading

Students will make connections to ideas in other texts.

TEKS 2.6.E

Language

Students will demonstrate understanding of the Tier 2 word *quest*.

TEKS 2.3.B

Writing

Students will find answers to research questions about aviators and their contributions to aviation.

TEKS 2.13.C

FORMATIVE ASSESSMENT

Quick Write

Write a sentence that explains how Jerrie Mock and Joan Merriam Smith are different from Amelia Earhart. Write a sentence that explains how Jerrie Mock and Joan Merriam Smith are similar to Amelia Earhart.

TEKS 2.6.E

Activity Page 2.2

What questions do you have about the contributions of these aviators?

TEKS 2.13.C

TEKS 2.6.E Make connections to personal experiences, ideas in other texts, and society; **TEKS 2.3.B** Use context within and beyond a sentence to determine the meaning of unfamiliar words; **TEKS 2.13.C** Identify and gather relevant sources and information to answer the questions.

LESSON AT A GLANCE

	Grouping	Time	Materials
Introducing the Read-Aloud (10 min.)			
Making Connections	Whole Group	10 min.	❏ Aviation Timeline (Digital Components) ❏ Activity Page 2.2 ❏ world map
Essential Background Information			
Read-Aloud (25 min.)			
Purpose for Listening	Whole Group	25 min.	❏ Aviation Timeline (Digital Components) ❏ Activity Page 2.2 ❏ *Aim for the Skies: Jerrie Mock and Joan Merriam Smith's Race to Complete Amelia Earhart's Quest* by Aimee Bissonette ❏ world map
Aim for the Skies: Jerrie Mock and Joan Merriam Smith's Race to Complete Amelia Earhart's Quest			
Comprehension Questions			
Word Work: *Quest*			
Application (25 min.)			
Searching for Answers	Whole Group/ Independent/ Partner	25 min.	❏ Activity Pages 2.2, 4.1, 12.1

ADVANCE PREPARATION

Introducing the Read-Aloud

- Prepare to project the Aviation Timeline (Digital Components).
- Students will need to reference Activity Page 2.2.

Read-Aloud

- Prepare to read aloud the trade book *Aim for the Skies: Jerrie Mock and Joan Merriam Smith's Race to Complete Amelia Earhart's Quest* by Aimee Bissonette. As you preview the book, you may wish to add page numbers and reference the guided reading supports included in this lesson. This trade book does not have numbered pages, but for ease of use we have referred to page numbers in our materials. We begin with page 1, which contains an illustration of a little girl looking out the window of an airplane, and number each page in order after that. The book ends on page 28.

Application

- Prepare a research question that you will use for modeling how to identify a resource and find information to answer questions.
- Display Activity Pages 4.1 and 12.1.
- Group students in pairs to work together at various times during the Application activity.
- Prepare resources that students can use for their research, such as website addresses for locally approved sources, trade books from the unit, examples of primary and secondary sources, additional books from the school library, etc.

Universal Access

- Students may reference Activity Page 2.2 throughout the lesson.

CORE VOCABULARY

companions, n. people or things that accompany another
Example: My teddy bear was my constant companion when I was a toddler.
Variation(s): companion

groggy, adj. weak and unsteady on the feet or in action
Example: I was so groggy from not sleeping last night that I almost poured coffee in my cereal instead of milk!
Variation(s): none

quest, n. an act or instance of seeking
Example: They went on a quest for gold.
Variation(s): quests

stunned, v. having been overcome with astonishment or disbelief
Example: I was stunned at the news that I had won the lottery.
Variation(s): stun

tailwinds, n. winds that blow in the same direction as something (such as a ship or an airplane) that is moving forward
Example: The tailwind helped the marathon runner to complete the race.
Variation(s): tailwind

turbulence, n. irregular movements of air currents
Example: The ride got rough when the plane hit turbulence.
Variation(s): none

Vocabulary Chart for *Aim for the Skies: Jerrie Mock and Joan Merriam Smith's Race to Complete Amelia Earhart's Quest*

Vocabulary Type	**Tier 3 Unit-Specific Words**	**Tier 2 General Academic Words**	**Tier 1 Everyday Speech Words**
Vocabulary	tailwinds turbulence	companions groggy **quest**	
Multiple-Meaning Vocabulary Words		stunned	
Sayings and Phrases			

Lesson 12: Aim for the Skies

Introducing the Read-Aloud

10M

Reading: Students will make connections to ideas in other texts.

TEKS 2.6.E

MAKING CONNECTIONS (5 MIN.)

- Ask students to find Activity Page 2.2 in their Activity Book.
- Ask students who they learned about in the previous lesson. *(Beatrice Shilling)* Ask them to share how Beatrice is similar to and different from the other people in this unit.
- Explain that a *quest* is when someone is seeking or looking for something. Ask, "Can anyone explain what Amelia Earhart's quest was?" *(to be the first woman to fly around the world)*
- Have students preview the front and back covers of today's Read-Aloud and read the title. Have them discuss what kind of book this is (fiction or nonfiction) and what it might be about.
- Model making a connection to prior knowledge. Think aloud, "The title of this book and the cover remind me of the passage we read about Amelia Earhart. I thought the story of Amelia Earhart's life was very interesting. Because I already know that she was not able to achieve her goal to be the first woman to fly around the world, I am looking forward to finding out whether the two aviators mentioned in the title are able to complete Amelia's quest."

ESSENTIAL BACKGROUND INFORMATION (5 MIN.)

- Tell students that they are going to hear a story about two more aviators from the United States. One is named Jerrie Mock, from Ohio (point it out on a map). The other is named Joan Merriam Smith, and she was from California (point it out on a map).

TEKS 2.6.E Make connections to personal experiences, ideas in other texts, and society.

Lesson 12: Aim for the Skies

Read-Aloud

25M

Reading: Students will make connections to ideas in other texts.
TEKS 2.6.E

Language: Students will demonstrate understanding of the Tier 2 word *quest.*
TEKS 2.3.B

PURPOSE FOR LISTENING

- Have students think about what they already know about aviation and Amelia Earhart's quest in particular as the story is read in order to identify the important events that take place.

AIM FOR THE SKIES: JERRIE MOCK AND JOAN MERRIAM SMITH'S RACE TO COMPLETE AMELIA EARHART``````'S QUEST (15 MIN.)

- Read aloud the trade book *Aim for the Skies: Jerrie Mock and Joan Merriam Smith's Race to Complete Amelia Earhart's Quest* by Aimee Bissonette. As you read, incorporate the following information and guided reading supports:
  - On page 8, explain that *stunned* means when something happens that causes someone to feel shocked or disbelief. Joan was stunned when she heard Jerrie was setting out to fly around the world.
  - On page 10, explain that a *companion* is someone or something that goes along with someone or something else. Ask, "Who were Joan's companions on her flight around the world?" *(a stuffed koala bear and a stuffed polar bear)*
  - One page 12, ask students if they remember what the word *throttle* means? *(a device on a machine, like a car or airplane, that controls the flow of fuel to an engine allowing the machine to speed up)*
  - Pause after page 12 and ask students whether they remember the story that was read about another competition between two aviators. *(Louis Blériot and Alberto Santos-Dumont)*

TEKS 2.6.E Make connections to personal experiences, ideas in other texts, and society; **TEKS 2.3.B** Use context within and beyond a sentence to determine the meaning of unfamiliar words.

- On page 20, explain that *groggy* means to feel weak or unsteady. Ask, "Why do you think it would be dangerous to fly an airplane if you feel groggy?" *(Answers may vary.)*
- Also explain that *turbulence* is irregular currents in the atmosphere that cause an up-and-down motion.
- After reading, discuss with students how making connections to information in the story keeps them actively involved in the reading process and helps them understand and remember what they have read.
- Ask a volunteer to point out Joan Merriam Smith and Jerrie Mock on the Aviation Timeline. *(1964)*

Support

Point out specific sections of the text that will help students find answers to the questions.

COMPREHENSION QUESTIONS (5 MIN.)

1. **Literal.** What was Joan Merriam Smith and Jerrie Mock's quest? *(to be the first woman to fly around the world)*
2. **Literal.** How did Joan and Jerrie end up competing to see who would be the first to fly around the world? *(They had the goal of being the first woman to fly around the world. The newspapers found out about the two aviators and turned their dream into a competition.)*
3. **Evaluative.** How did the competition push each of the aviators to try harder to win? *(Answers may vary but should include that each of the aviators pushed each other because they both wanted to be the first woman to fly around the world.)*
4. **Inferential.** Think-Pair-Share: Why do you think Joan decided to finish the trip even though Jerrie had already won? *(Answers may vary.)*

WORD WORK: QUEST (5 MIN.)

1. The title of the story contains the line ". . . race to complete Amelia Earhart's quest."
2. A *quest* is something that is trying to be completed or achieved.
3. In Lesson 8, you learned about Amelia Earhart's quest. What was her *quest*?
4. Can you think of other historical figures that have set forth on a quest?
5. What is the word we have been talking about?

Use a Making Choices activity for follow-up. Say: "I am going to read statements. If the statement describes a quest, say, 'That is a quest.' If the sentence does not describe a quest, say, 'That is not a quest.'"

- the Pilgrims coming to America to start a new life *(That is a quest.)*
- walking from the living room to the kitchen to get a snack *(That is not a quest.)*
- climbing Mount Everest *(That is a quest.)*
- astronauts going to Mars *(That is a quest.)*
- going grocery shopping *(That is not a quest.)*

Challenge

Ask students to name some of the quests of the other aviators they have learned about.

Support

Provide students with synonyms for the word *quest*.

Lesson 12: Aim for the Skies

Application

25M

Writing: Students will find answers to research questions about aviators and their contributions to aviation.

TEKS 2.13.C

ORGANIZING INFORMATION (25 MIN.)

- Follow the same procedure as Lesson 10 Application for modeling and partner work.
- Direct students to turn to Activity Page 12.1 in their Activity Book. Explain that they will use this page to help them organize their research about their third chosen aviator. Project a class copy of Activity Page 10.1. Review this copy with the class.
- Have students work in pairs to complete their graphic organizers with their third chosen aviator using the information they have recorded on Activity Page 2.2. If students find it necessary to supplement the information that they have researched in previous lessons, allow them to use the resources to do so.
- After students have had a chance to find information to answer their questions, invite several volunteers to share their questions with the class and the answers they found.

Activity Page 12.1

Challenge

Have students use primary and secondary resources to answer their questions.

Support

Provide 1:1 support to students to help them find answers to their questions.

TEKS 2.13.C Identify and gather relevant sources and information to answer the questions.

Quick Write

- Write a sentence that explains how Jerrie Mock and Joan Merriam Smith are different from Amelia Earhart. Write a sentence that explains how Jerrie Mock and Joan Merriam Smith are similar to Amelia Earhart. **TEKS 2.6.E**
- Writing: Activity Page 2.2: What else do you wonder about Jerrie Mock and Joan Merriam Smith? **TEKS 2.13.C**
- Have students complete Activity Page 2.2 for this lesson. Also, have them list any resources they could use to answer their questions.

End Lesson

EMERGENT BILINGUAL STUDENTS

Application

Beginning
Have students orally express answers they have found to research questions.

Intermediate
Have students answer research questions using key words and phrases.

Advanced/Advanced High
Have students answer research questions using complete sentences.

ELPS 2.C; ELPS 4.D; ELPS 5.G

TEKS 2.6.E Make connections to personal experiences, ideas in other texts, and society; **TEKS 2.13.C** Identify and gather relevant sources and information to answer the questions.

LESSON

13

FLIGHT AND THE STORY OF AVIATION

Organizing and Drafting

PRIMARY FOCUS OF LESSON

Writing

Students will organize and write a draft of their presentation for the Aviators Hall of Fame.

TEKS 2.11.B.i; TEKS 2.11.B.ii

FORMATIVE ASSESSMENT

Activity Page 11.1

Students will use graphic organizers to organize the information they found in their research and write a draft of their presentation for the Aviators Hall of Fame.

TEKS 2.11.B.i; TEKS 2.11.B.ii; TEKS 2.13.C

TEKS 2.11.B Develop drafts into a focused piece of writing by (i) organizing with structure and (ii) developing an idea with specific and relevant details; **TEKS 2.13.C** Identify and gather relevant sources and information to answer the questions.

LESSON AT A GLANCE

	Grouping	Time	Materials
Application (60 min.)			
Drafting	Whole Group/ Independent/ Partner	60 min.	❑ Activity Pages 2.2, 4.1, 10.1, 11.1, 12.1, 13.1 ❑ Aviation Timeline (Digital Components) ❑ My Research Plan (Digital Components) ❑ Aviators Hall of Fame (Digital Components) ❑ Focus Words (Digital Components) ❑ Informational Writing Rubric (Digital Components)

ADVANCE PREPARATION

Application

- Prepare to distribute three copies of Activity Page 13.1 to each student.
- Gather and display all trade books from the unit.
- Display the Aviation Timeline (Digital Components).
- Students may need to reference Activity Page 2.2.
- Prepare to display the Informational Writing Rubric.
- Display Activity Pages 4.1 and 13.1 and the writing of Activity Page 10.1.
- Prepare and display a list of the focus words from the unit Focus Words (Digital Components):

    1. aviation
    2. innovations
    3. designing
    4. sputters
    5. spherical
    6. accomplishment
    7. contribution
    8. persisted
    9. barrier
    10. quest

Informational Writing Rubric (Digital Components)

Informational Writing Rubric			
	Advanced	**Proficient**	**Basic**
Composition	• My writing includes a clear topic and 3–4 supporting details in each paragraph. • Related information is grouped together. • Details include accurate facts and information. • Clear and supportive linking words and phrases connect details in each paragraph. • A concluding section or statement reflects the topic.	• My writing includes a topic and supporting details. • Information may be grouped together. • Details may include facts or information. • Linking words may be used throughout the report. • A concluding statement may reflect the topic.	• My writing includes a topic and details. • Information is listed in no particular order. • Facts or information are listed. • Linking words may be used, but may confuse the reader. • A concluding statement is made, but may not relate to the topic.
Writing Conventions and Language Standards	• I used a variety of complete sentences with subject-verb agreement. • I used correct capitalization at the beginning of sentences and the names of people, places, and things, as well as correct punctuation. • I used correct spelling, including high frequency words, throughout my entire story with no more than 3–4 errors. • I correctly formed and connected all my cursive letters.	• I wrote simple sentences with inconsistent subject-verb agreement. • I used correct capitalization at the beginning of sentences and the names of people, places, and things with 2–3 errors and some use of punctuation. • I used correct spelling throughout my entire story with 5–6 errors. • I used correct letter formation and connected all letters in my cursive writing most of the time.	• I wrote simple, incomplete sentences with no evidence of subject-verb agreement. • I used capitalization at the beginning of sentences and the names of people, places, and things, but have 4 or more errors and inconsistent use of punctuation. • I tried spelling words correctly throughout my writing, but have more than 6 errors. • I tried to correctly form and connect all letters in my cursive writing.
Use an appropriate mode of delivery, whether written, oral, or multimodal, to present results.	• The presenter: ◦ communicates ideas effectively, ◦ uses language purposefully to convey meaning.	• The presenter: ◦ communicates ideas clearly, ◦ uses language to convey meaning.	• The presenter does not do one or more of the following: ◦ communicate ideas clearly, ◦ use language to convey meaning.

Start Lesson

Lesson 13: Organizing and Drafting

Application

60M

Writing: Students will organize and write a draft of their presentation for the Aviators Hall of Fame.

TEKS 2.11.B.i; TEKS 2.11.B.ii

Challenge

Encourage students to incorporate complete sentences with subject-verb agreement in their paragraphs.

Support

Work with students in small groups or individually to complete the graphic organizer.

Activity Pages 2.2, 10.1, 11.1, and 12.1

DRAFTING (60 MIN.)

- Ask students to find Activity Page 2.2 in their Activity Book.
- Give them a few minutes to review Activity Page 2.2, the class timeline, and any other resource materials.
- Gather students together again and project Activity Page 4.1. Ask students which steps have been completed and which step is next.
- Tell students that they will be moving on to step 4 of the research plan.
- Direct students to find Activity Pages 10.1, 11.1, and 12.1. Explain that they will use these pages to help them write about their chosen aviators.
- Tell students that they will now use the information from the graphic organizer to draft an informative text.
- Use the graphic organizer that was completed with the class in Lesson 10 to model for students how to use the information to write an informative paragraph about their chosen aviators.
- Write your model text in cursive to motivate students to use their cursive skills in their presentations. Remind students to use the cursive skills they have been practicing in the skills lessons.
- As you are modeling, be sure to refer to the focus words of the unit and incorporate them where possible in the example.
- Create a class copy of the paragraph for students to use as reference as well as an example to show the procedure for editing in Lesson 14.
- Tell students that first they need to create a topic sentence. Explain that this is the very first sentence of the paragraph and tells who your paragraph is going to be about. Remind students that the first sentence of the paragraph

TEKS 2.11.B Develop drafts into a focused piece of writing by (i) organizing with structure and (ii) developing an idea with specific and relevant details.

is always indented. Model how to indent the first sentence of the paragraph. Model writing a topic sentence. For example, " _____ is an aviator who . . ."

- Next, model writing by showing how to add at least three details to their paragraphs using the information that was recorded on each of the boxes of the graphic organizer using sentence starters. For example, "This aviator is important because . . ." "Something interesting about this aviator is . . ." "Another fact about this aviator is . . ." Have students turn to a partner to practice adding three details using the sentence starters.
- Lastly, model writing by showing that they will need to use a closing sentence to finish the paragraph. Tell students that this would be a good place to explain why people should learn about this person.
- Direct students' attention to the Informational Writing Rubric and model how to use it as a checklist to assess the example paragraph.
- Have students work in pairs to draft informative paragraphs about their three chosen aviators. They will use an individual copy of Activity Page 13.1 for each aviator. Remind students to refer to the focus words of the unit and incorporate at least one in each paragraph.
- After students have composed their paragraphs, remind them to go back and use the Informational Writing Rubric as a checklist to be sure that they have incorporated all necessary elements in their writing.
- Collect students' drafts to distribute in the next day's lesson.

End Lesson

EMERGENT BILINGUAL STUDENTS

Application

Beginning
Have students dictate the information to an adult.

Intermediate
Have students collaborate with a peer to write their information on a graphic organizer.

Advanced/Advanced High
Have students work independently on a graphic organizer to write their information and read it aloud to a teacher.

ELPS 2.C; ELPS 4.D; ELPS 5.G

LESSON

14

FLIGHT AND THE STORY OF AVIATION

Editing and Practicing

PRIMARY FOCUS OF LESSON

Writing

Students will edit the draft of their presentations.

TEKS 2.11.D.i–xi

Speaking and Listening

Students will share their writing with a partner.

TEKS 2.1.C

FORMATIVE ASSESSMENT

Activity Page 14.1

Students will work with a partner to edit the draft of their presentation and practice sharing it with a partner.

TEKS 2.1.C; TEKS 2.11.D

TEKS 2.11.D Edit drafts using standard English conventions, including: (i) complete sentences with subject-verb agreement; (ii) past, present, and future verb tense; (iii) singular, plural, common, and proper nouns; (iv) adjectives, including articles; (v) adverbs that convey time and adverbs that convey place; (vi) prepositions and prepositional phrases; (vii) pronouns, including subjective, objective, and possessive cases; (viii) coordinating conjunctions to form compound subjects and predicates; (ix) capitalization of months, days of the week, and the salutation and conclusion of a letter; (x) end punctuation, apostrophes in contractions, and commas with items in a series and in dates; and (xi) correct spelling of words with grade-appropriate orthographic patterns and rules and high-frequency words; **TEKS 2.1.C** Share information and ideas that focus on the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language.

LESSON AT A GLANCE

	Grouping	Time	Materials
Application (60 min.)			
Editing and Practicing	Whole Group/ Independent/ Partner	60 min.	❏ class copy of draft from Lesson 13 ❏ Activity Pages 4.1, 10.1, 13.1, 14.1 ❏ Peer Editing Checklist (Digital Components)

ADVANCE PREPARATION

Application

- Prepare to return students' drafts (Activity Page 13.1) to each student.
- Display the writing on Activity Pages 4.1 and 10.1. Modify the class copy of Activity Page 13.1 with common errors that students might make in their drafts, such as capitalization, spelling, and punctuation errors.
- Display the checklist and make enough copies to give to each student.
- Make enough copies of Activity Page 13.1 for students to use for their final copies.
- Prepare and display a list of the focus words from the unit Focus Words (Digital Components):

    1. aviation
    2. innovations
    3. designing
    4. sputters
    5. spherical
    6. accomplishment
    7. contribution
    8. persisted
    9. barrier
    10. quest

- Group students in pairs for peer editing.

Start Lesson

Lesson 14: Editing and Practicing

Application

60M

Writing: Students will edit the draft of their presentation.

TEKS 2.11.D.i–xi

Speaking and Listening: Students will share their writing with a partner.

TEKS 2.1.C

EDITING AND PRACTICING (60 MIN.)

- Tell students that during the next lesson they will be presenting their writings to the class. So, during this lesson, they will be editing their presentations with a partner (or peer).
- Explain that this is called peer editing. Explain that editing means to review what they have written and make any changes that are necessary to make it ready to present.
- Distribute students' drafts from the previous lesson and project the class copy of Activity Page 13.1 that has been modified with various capitalization, punctuation, and spelling errors. Also, project the checklist.
- Distribute copies of the checklist to students. Explain that they will be using it to have a partner review their writing and then they will do the same for their partner.
- Review the items on the checklist with students.
- Remind students that a preposition is a word that can help tell where something is taking place. Prepositions include words such as *in, out, under,* and *above*. Point out that prepositions are useful in making simple sentences longer and more interesting.
- Remind students that a prepositional phrase is a phrase that begins with a preposition and is followed by an object (e.g., *in the cave, on the table, under the rock, above the clouds*). A prepositional phrase answers the same question, "where?", that a preposition answers about something in a

Support

Work with students in small groups or individually to make corrections to their drafts.

TEKS 2.11.D Edit drafts using standard English conventions, including: (i) complete sentences with subject-verb agreement; (ii) past, present, and future verb tense; (iii) singular, plural, common, and proper nouns; (iv) adjectives, including articles; (v) adverbs that convey time and adverbs that convey place; (vi) prepositions and prepositional phrases; (vii) pronouns, including subjective, objective, and possessive cases; (viii) coordinating conjunctions to form compound subjects and predicates; (ix) capitalization of months, days of the week, and the salutation and conclusion of a letter; (x) end punctuation, apostrophes in contractions, and commas with items in a series and in dates; and (xi) correct spelling of words with grade appropriate orthographic patterns and rules and high-frequency words; **TEKS 2.1.C** Share information and ideas that focus on the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language.

sentence.

- Next, remind students what they have learned about using commas to separate a series of items (e.g., the dog, the cat, and the mouse) and in dates (e.g., Friday, November 14, 2025).
- Tell students that peer editing can be very useful because sometimes it is hard to see mistakes in their own writing.
- Ask for a volunteer to help you model the process of peer editing. Begin by reading the example paragraph to the volunteer.
- Explain that this is the first step in the review process.
- Next, ask the volunteer to look at the writing with you and use the checklist to determine which areas need improvement.
- Explain that all areas that receive a "no" or "sometimes" will need to be corrected.
- Tell students that, after they take turns reviewing their writing with their partner, they will edit their own writing by making any necessary corrections.
- Model for students how to make corrections on the writing.
- Tell students that they will be given paper to write their final copy on once their editing is complete.
- Have students group with their partners for peer editing.
- As they work collaboratively, circulate through the classroom and make sure they are reading their paragraphs to their partner. Some students might need support as to how to proceed with the checklist because they may get confused about how to check off what they are doing with their partner and then what they will be checking on their own.
- When partners are done editing each other's drafts, you may wish to conference with them to clear up any confusion and take a look at their editing before they begin making corrections on their drafts.
- After conferencing, students will be ready to transition into their own editing.
- As students work, circulate through the classroom to support them. Some may need redirection as to what to do next. Others will need to be reminded to read each sentence at a time and fix it.

EMERGENT BILINGUAL STUDENTS

Application

Beginning
Assist students with editing and writing the final copy for one aviator, orally presenting to a teacher during and after their writing.

Intermediate
Have students edit and write the final copy for a chosen aviator, orally presenting to a teacher after their writing.

Advanced/Advanced High
Have students orally present their writing to a teacher before writing their final copy.

ELPS 2.C; ELPS 4.D; ELPS 5.G

- Once students have finished editing their writing, give them three more copies of Activity Page 13.1 to write their final copies.
- After writing each final copy, have them use the frame to illustrate the aviator or an important event in their life.
- Collect final copies.

End Lesson

LESSON

15

FLIGHT AND THE STORY OF AVIATION

Sharing What We Have Learned

PRIMARY FOCUS OF LESSON

Speaking and Listening

Students will share their writing by presenting it to the class.

TEKS 2.1.C; TEKS 2.13.E; TEKS 2.13.G

FORMATIVE ASSESSMENT

Student Presentations Students will share their writing by presenting it to the class.

TEKS 2.1.C; TEKS 2.13.E; TEKS 2.13.G

TEKS 2.1.C Share information and ideas that focus on the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language; **TEKS 2.13.E** Demonstrate understanding of information gathered; **TEKS 2.13.G** Use an appropriate mode of delivery, whether written, oral, or multimodal, to present results.

LESSON AT A GLANCE

	Grouping	Time	Materials
Application (60 min.)			
Sharing Our Presentations	Whole Group/ Independent	60 min.	❑ class copy of Activity Page 13.1 ❑ students' final copy of presentation (Activity Page 13.1)

ADVANCE PREPARATION

Application

- Designate an area in the classroom or the school, such as a bulletin board, for the Aviators Hall of Fame.
- Return final copies of presentations to students.
- Have the class copy of Activity Page 13.1 available to model presenting with the class.

Start Lesson

Lesson 15: Sharing What We Have Learned

Application

60M

Speaking and Listening: Students will share their writing by presenting it to the class.

TEKS 2.1.C; TEKS 2.13.E

SHARING OUR PRESENTATIONS (60 MIN.)

- Congratulate students for participating in the unit and being great researchers.
- Tell students that they can now share with the class what they have found out about the aviators they chose to research. Explain that they will then be able to display their writings in the Aviators Hall of Fame.
- Tell them that before they begin, you will model how to present to the class.
- Before you begin, brainstorm skills for presenting with students.
- Write "Skills for Presenting" on the board or chart paper. Some ideas might be: speak clearly and loud enough so everyone in the classroom can hear, speak at an appropriate pace, look at the audience from time to time, practice what you will say.
- Present the class copy of Activity Page 13.1.
- After you have finished, tell students that they will be allowed to ask questions and offer feedback.
- Tell students that it is important to offer feedback in a positive way. Some ways they could do this is by telling the presenter something they liked about the presentation and something that could make it even better. Allow students to share three positives and one suggestion.
- Have students present their writing to the class.
- Consider introducing each presenter with their name and the aviators they chose to write about to the class.
- After all students have presented, display their presentations in the Aviators Hall of Fame.

End Lesson

TEKS 2.1.C Share information and ideas that focus on the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language; **TEKS 2.13.E** Demonstrate understanding of information gathered.

Support

Allow students to choose a partner to accompany them when presenting.

EMERGENT BILINGUAL STUDENTS

Application

Beginning
Students may have an assistant with them when presenting their writing on one aviator.

Intermediate
Students may have an assistant with them when presenting their writing on two aviators.

Advanced/Advanced High
Students may choose an assistant when presenting to the class.

ELPS 3.C

Challenge

Have students choose one or more of the questions posed by the class during the presentation to do more research on.

Teacher Resources

Grade 2	Unit 11

Teacher Guide

Grade 2 | Unit 11

Teacher Resources

In this section you will find:

- "The Swing" by Robert Louis Stevenson
- "The Poet and His Song" by Paul Laurence Dunbar
- Activity Book Answer Key
- Texas Essential Knowledge and Skills Correlation Chart
- English Language Proficiency Standard Correlation Chart

The Swing

Robert Louis Stevenson

How do you like to go up in a swing,
Up in the air so blue?
Oh, I do think it the pleasantest thing
Ever a child can do!

Up in the air and over the wall,
Till I can see so wide,
River and trees and cattle and all
Over the countryside—

Till I look down on the garden green,
Down on the roof so brown—
Up in the air I go flying again,
Up in the air and down!

The Poet and His Song (Stanza 1)

Paul Laurence Dunbar

A song is but a little thing,
And yet what joy it is to sing!
In hours of toil it gives me zest,
And when at eve I long for rest;
When cows come home along the bars,
And in the fold I hear the bell,
As Night, the shepherd, herds his stars,
I sing my song, and all is well.

NAME: _____
DATE: _____

1.1 Activity Page

KWL Chart

Know	Wonder	Learn
Answers may vary.	Answers may vary.	Answers may vary.

NAME: _____
DATE: _____

2.1 Activity Page

The Montgolfiers' Invention

Write a sentence and draw pictures to answer the "Who," "Where," "What," and "How" questions.

Who?	Who invented the hot-air balloon? Answers may vary.
Where?	Where did the Montgolfiers live? Answers may vary.
What?	What did Joseph discover? Answers may vary.
How?	How did the Montgolfiers achieve their goal of flying? Answers may vary.

NAME: _____
DATE: _____

2.2 Activity Page

The Age of Aviation

Lesson #	Aviator (s) / Invention/ Aircraft	Question/ Answer	Question / Answer	Question/ Answer	Research Resources
1	Answers may vary.	Answers may vary.	Answers may vary.	Answers may vary.	Answers may vary.
2	Answers may vary.	Answers may vary.	Answers may vary.	Answers may vary.	Answers may vary.

The Age of Aviation

Lesson #	Aviator (s) / Invention/ Aircraft	Question/ Answer	Question / Answer	Question/ Answer	Research Resources
3	Answers may vary.	Answers may vary.	Answers may vary.	Answers may vary.	Answers may vary.
4	Answers may vary.	Answers may vary.	Answers may vary.	Answers may vary.	Answers may vary.

The Age of Aviation

Lesson #	Aviator (s) / Invention/ Aircraft	Question/ Answer	Question / Answer	Question/ Answer	Research Resources
5	Answers may vary.	Answers may vary.	Answers may vary.	Answers may vary.	Answers may vary.
6	Answers may vary.	Answers may vary.	Answers may vary.	Answers may vary.	Answers may vary.

The Age of Aviation

Lesson #	Aviator (s) / Invention/ Aircraft	Question/ Answer	Question / Answer	Question/ Answer	Research Resources
7	Answers may vary.	Answers may vary.	Answers may vary.	Answers may vary.	Answers may vary.
8	Answers may vary.	Answers may vary.	Answers may vary.	Answers may vary.	Answers may vary.

The Age of Aviation

Lesson #	Aviator (s) / Invention/ Aircraft	Question/ Answer	Question / Answer	Question/ Answer	Research Resources
9	Answers may vary.	Answers may vary.	Answers may vary.	Answers may vary.	Answers may vary.
10	Answers may vary.	Answers may vary.	Answers may vary.	Answers may vary.	Answers may vary.

The Age of Aviation

Lesson #	Aviator (s) / Invention/ Aircraft	Question/ Answer	Question / Answer	Question/ Answer	Research Resources
11	Answers may vary.	Answers may vary.	Answers may vary.	Answers may vary.	Answers may vary.
12	Answers may vary.	Answers may vary.	Answers may vary.	Answers may vary.	Answers may vary.

NAME: _____

DATE: _____

3.1 Activity Page

Who, What, When, Where, Why, and How

Create a question about the text using Who, What, When, Where, Why, and How. For example: Who invented the world's first powered airplane?

Who?	Answers may vary.
What?	Answers may vary.
When?	Answers may vary.
Where?	Answers may vary.
Why?	Answers may vary.
How?	Answers may vary.

NAME: _____

DATE: _____

9.1 Activity Page

Primary and Secondary Sources

A primary source is . . .	A secondary source is . . .
Photograph	Encyclopedia
Interview	Magazine Articles
Speech	Textbooks
Diaries and Journals	Books

Cut the sources apart and glue them into the correct place on the above chart.

Photograph	Encyclopedia
Interview	Magazine Articles
Speech	Textbooks
Books	Diaries and Journals

NAME: _____

DATE: _____

10.1 Activity Page

Aviation Graphic Organizer

Aviator: Answers may vary for all questions.

1) What are three facts about this aviator?

2) What are two important things this aviator has accomplished?

3) What are three words that describe this aviator?

4) Why should people learn about this aviator?

NAME: _____

DATE: _____

11.1 Activity Page

Aviation Graphic Organizer

Aviator: Answers may vary for all questions.

1) What are three facts about this aviator?

2) What are two important things this aviator has accomplished?

3) What are three words that describe this aviator?

4) Why should people learn about this aviator?

NAME: _____

DATE: _____

12.1 Activity Page

Aviation Graphic Organizer

Aviator: Answers may vary for all questions.

1) What are three facts about this aviator?

2) What are two important things this aviator has accomplished?

3) What are three words that describe this aviator?

4) Why should people learn about this aviator?

TEXAS ESSENTIAL KNOWLEDGE AND SKILLS - GRADE 2

Unit 11		Correlation—Teacher's Guide
(1) Developing and sustaining foundational language skills: listening, speaking, discussion, and thinking—oral language. The student develops oral language through listening, speaking, and discussion. The student is expected to:		
TEKS 2.1.A	listen actively, ask relevant questions to clarify information, and answer questions using multi-word responses	p. 40, p. 46, p. 64, p. 68, p. 69, p. 128, p. 133, p. 134
TEKS 2.1.B	follow, restate, and give oral instructions that involve a short, related sequence of actions	
TEKS 2.1.C	share information and ideas that focus on the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language	p. 40, p. 45, p. 154, p. 157, p. 160, p. 163
TEKS 2.1.D	work collaboratively with others by following agreed-upon rules for discussion, including listening to others, speaking when recognized, making appropriate contributions, and building on the ideas of others	
TEKS 2.1.E	develop social communication such as distinguishing between asking and telling	
(2) Developing and sustaining foundational language skills: listening, speaking, reading, writing, and thinking–beginning reading and writing. The student develops word structure knowledge through phonological awareness, print concepts, phonics, and morphology to communicate, decode, and spell. The student is expected to:		
(A) demonstrate phonological awareness by:		
TEKS 2.2.A.i	producing a series of rhyming words;	
TEKS 2.2.A.ii	distinguishing between long and short vowel sounds in one-syllable and multi-syllable words;	
TEKS 2.2.A.iii	recognizing the change in spoken word when a specified phoneme is added, changed, or removed;	
TEKS 2.2.A.iv	manipulating phonemes within base words	
(B) demonstrate and apply phonetic knowledge by:		
TEKS 2.2.B.i	decoding words with short, long, or variant vowels, trigraphs and blends;	
TEKS 2.2.B.ii	decoding words with silent letters such as *knife* and *gnat*;	
TEKS 2.2.B.iii	decoding multisyllabic words with closed syllables; open syllables; VCe syllables; vowel teams, including digraphs and diphthongs; r-controlled syllables; and final stable syllables;	
TEKS 2.2.B.iv	decoding compound words, contractions, and common abbreviations;	
TEKS 2.2.B.v	decoding words using knowledge of syllable division patterns such as VCCV, VCV, and VCCCV;	
TEKS 2.2.B.vi	decoding words with prefixes including *un-*, *re-*, and *dis-*, and inflectional endings, including *-s, -es, -ed, -ing, -er*, and *-est;*	
TEKS 2.2.B.vii	identifying and reading high-frequency words from a research-based list	
(C) demonstrate and apply spelling knowledge by:		

TEXAS ESSENTIAL KNOWLEDGE AND SKILLS - GRADE 2

Unit 11		Correlation—Teacher's Guide
TEKS 2.2.C.i	spelling one-syllable and multisyllabic words with closed syllables; open syllables; VCe syllables; vowel teams, including digraphs and diphthongs; r-controlled syllables; and final stable syllables;	
TEKS 2.2.C.ii	spelling words with silent letters such as *knife* and *gnat*;	
TEKS 2.2.C.iii	spelling compound words, contractions, and common abbreviations;	
TEKS 2.2.C.iv	spelling multisyllabic words with multiple sound-spelling patterns;	
TEKS 2.2.C.v	spelling words using knowledge of syllable division patterns, including words with double consonants in the middle of the word;	
TEKS 2.2.C.vi	spelling words with prefixes, including *un-, re-*, and *dis-*, and inflectional endings, including *-s, -es, -ed, -ing, -er,* and *-est*	
TEKS 2.2.D	alphabetize a series of words and use a dictionary or glossary to find words;	
TEKS 2.2.E	develop handwriting by accurately forming all cursive letters using appropriate strokes when connecting letters	p. 5, p. 98
(3) Developing and sustaining foundational language skills: listening, speaking, reading, writing, and thinking—vocabulary. The student uses newly acquired vocabulary expressively. The student is expected to:		
TEKS 2.3.A	use print or digital resources to determine meaning and pronunciation of unknown words	
TEKS 2.3.B	use context within and beyond a sentence to determine the meaning of unfamiliar words	p. 6, p. 12, p. 20, p. 25, p. 28, p. 30, p. 35, p. 39, p. 40, p. 46, p. 52, p. 57, p. 64, p. 69, p. 78, p. 83, p. 88, p. 93, p. 104, p. 109, p. 114, p. 120, p. 138, p. 143
TEKS 2.3.C	identify the meaning of and use words with affixes *un-, re-, -ly, -er,* and *-est* (comparative and superlative), and *-ion/tion/sion*	
TEKS 2.3.D	identify, use, and explain the meaning of antonyms, synonyms, idioms, and homographs in context	
(4) Developing and sustaining foundational language skills: listening, speaking, reading, writing, and thinking–fluency. The student reads grade-level text with fluency and comprehension. The student is expected to use appropriate fluency (rate, accuracy, and prosody) when reading grade-level text.		
TEKS 2.4	use appropriate fluency (rate, accuracy, and prosody) when reading grade-level text	
(5) Developing and sustaining foundational language skills: listening, speaking, reading, writing, and thinking—self-sustained reading. The student reads grade-appropriate texts independently. The student is expected to self-select text and read independently for a sustained period of time.		
TEKS 2.5	self-select text and read independently for a sustained period of time	
(6) Comprehension skills: listening, speaking, reading, writing, and thinking using multiple texts. The student uses metacognitive skills to both develop and deepen comprehension of increasingly complex texts. The student is expected to:		
TEKS 2.6.A	establish purpose for reading assigned and self-selected texts	p. 6, p. 12, p. 20, p. 24, p. 25
TEKS 2.6.B	generate questions about text before, during, and after reading to deepen understanding and gain information	

TEXAS ESSENTIAL KNOWLEDGE AND SKILLS - GRADE 2

Unit 11		Correlation—Teacher's Guide
TEKS 2.6.C	make and correct or confirm predictions using text features, characteristics of genre, and structures	p. 78, p. 82, p. 83
TEKS 2.6.D	create mental images to deepen understanding	
TEKS 2.6.E	make connections to personal experiences, ideas in other texts, and society	p. 104, p. 108, p. 109, p. 138, p. 142, p. 143, p. 147
TEKS 2.6.F	make inferences and use evidence to support understanding	p. 30, p. 34, p. 35
TEKS 2.6.G	evaluate details read to determine key ideas	p. 52, p. 56, p. 57
TEKS 2.6.H	synthesize information to create new understanding	
TEKS 2.6.I	monitor comprehension and make adjustments such as re-reading, using background knowledge, checking for visual cues, asking questions, and annotating when understanding breaks down	
(7) Response skills: listening, speaking, reading, writing, and thinking using multiple texts. The student responds to an increasingly challenging variety of sources that are read, heard, or viewed. The student is expected to:		
TEKS 2.7.A	describe personal connections to a variety of sources	p. 6, p. 11
TEKS 2.7.B	write brief comments on literary or informational texts that demonstrate an understanding of the text	
TEKS 2.7.C	use text evidence to support an appropriate response	
TEKS 2.7.D	retell and paraphrase texts in ways that maintain meaning and logical order	p. 88, p. 92, p. 93
TEKS 2.7.E	interact with sources in meaningful ways such as illustrating or writing	
TEKS 2.7.F	respond using newly acquired vocabulary as appropriate	
(8) Multiple genres: listening, speaking, reading, writing, and thinking using multiple texts–literary elements. The student recognizes and analyzes literary elements within and across increasingly complex traditional, contemporary, classical, and diverse literary texts. The student is expected to:		
TEKS 2.8.A	discuss topics and determine theme using text evidence with adult assistance	
TEKS 2.8.B	describe the main character's (characters') internal and external traits	p. 88, p. 97
TEKS 2.8.C	describe and understand plot elements, including the main events, the conflict, and the resolution, for texts read aloud and independently	
TEKS 2.8.D	describe the importance of the setting	
(9) Multiple genres: listening, speaking, reading, writing, and thinking using multiple texts–genres. The student recognizes and analyzes genre-specific characteristics, structures, and purposes within and across increasingly complex traditional, contemporary, classical, and diverse texts. The student is expected to:		
TEKS 2.9.A	demonstrate knowledge of distinguishing characteristics of well-known children's literature such as folktales, fables, and fairy tales	

TEXAS ESSENTIAL KNOWLEDGE AND SKILLS - GRADE 2

Unit 11		Correlation—Teacher's Guide
TEKS 2.9.B	explain visual patterns and structures in a variety of poems	
TEKS 2.9.C	discuss elements of drama such as characters, dialogue, and setting	
(D) recognize characteristics and structures of informational text, including:		
TEKS 2.9.D.i	the central idea and supporting evidence with adult assistance;	
TEKS 2.9.D.ii	features and graphics to locate and gain information;	
TEKS 2.9.D.iii	organizational patterns such as chronological order and cause and effect stated explicitly	
(E) recognize characteristics of persuasive text, including:		
TEKS 2.9.E.i	stating what the author is trying to persuade the reader to think or do	
TEKS 2.9.E.ii	distinguishing facts from opinion	
TEKS 2.9.F	recognize characteristics of multimodal and digital texts	
(10) Author's purpose and craft: listening, speaking, reading, writing, and thinking using multiple texts. The student uses critical inquiry to analyze the authors' choices and how they influence and communicate meaning within a variety of texts. The student analyzes and applies author's craft purposefully in order to develop his or her own products and performances. The student is expected to:		
TEKS 2.10.A	discuss the author's purpose for writing text	p. 114, p. 118, p. 120
TEKS 2.10.B	discuss how the use of text structure contributes to the author's purpose	p. 128, p. 134
TEKS 2.10.C	discuss the author's use of print and graphic features to achieve specific purposes	
TEKS 2.10.D	discuss the use of descriptive, literal, and figurative language	
TEKS 2.10.E	identify the use of first or third person in a text	
TEKS 2.10.F	identify and explain the use of repetition	
(11) Composition: listening, speaking, reading, writing, and thinking using multiple texts—writing process. The student uses the writing process recursively to compose multiple texts that are legible and uses appropriate conventions. The student is expected to:		
TEKS 2.11.A	plan a first draft by generating ideas for writing such as drawing and brainstorming	
(B) develop drafts into a focused piece of writing by:		
TEKS 2.11.B.i	organizing with structure; and	p. 148, p. 152
TEKS 2.11.B.ii	developing an idea with specific and relevant details	p. 148, p. 152
TEKS 2.11.C	revise drafts by adding, deleting, or rearranging words, phrases, or sentences	
(D) edit drafts using standard English conventions, including:		
TEKS 2.11.D	edit drafts using standard English conventions	p. 154, p. 157
TEKS 2.11.D.i	complete sentences with subject-verb agreement;	p. 154, p. 157
TEKS 2.11.D.ii	past, present, and future verb tense;	p. 154, p. 157

TEXAS ESSENTIAL KNOWLEDGE AND SKILLS - GRADE 2

Unit 11		Correlation—Teacher's Guide
TEKS 2.11.D.iii	singular, plural, common, and proper nouns;	p. 154, p. 157
TEKS 2.11.D.iv	adjectives, including articles;	p. 154, p. 157
TEKS 2.11.D.v	adverbs that convey time and adverbs that convey place;	p. 154, p. 157
TEKS 2.11.D.vi	prepositions and prepositional phrases;	p. 154, p. 157
TEKS 2.11.D.vii	pronouns, including subjective, objective, and possessive cases;	p. 154, p. 157
TEKS 2.11.D.viii	coordinating conjunctions to form compound subjects and predicates;	p. 154, p. 157
TEKS 2.11.D.ix	capitalization of months, days of the week, and the salutation and conclusion of a letter;	p. 154, p. 157
TEKS 2.11.D.x	end punctuation, apostrophes in contractions, and commas with items in a series and in dates;	p. 154, p. 157
TEKS 2.11.D.xi	correct spelling of words with grade-appropriate orthographic patterns and rules and high-frequency words;	p. 154, p. 157
TEKS 2.11.E	publish and share writing	
(12) Composition: listening, speaking, reading, writing, and thinking using multiple texts–genres. The student uses genre characteristics and craft to compose multiple texts that are meaningful. The student is expected to:		
TEKS 2.12.A	compose literary texts, including personal narratives and poetry	
TEKS 2.12.B	compose informational texts, including procedural texts and reports	
TEKS 2.12.C	compose correspondence such as thank you notes or letters	
(13) Inquiry and research: listening, speaking, reading, writing, and thinking using multiple texts. The student engages in both short-term and sustained recursive inquiry processes for a variety of purposes. The student is expected to:		
TEKS 2.13.A	generate questions for formal and informal inquiry with adult assistance	p. 6, p. 18, p. 19, p. 20, p. 27, p. 28, p. 30, p. 38, p. 39, p. 40, p. 50, p. 52, p. 63, p. 64, p. 75, p. 76, p. 78, p. 87, p. 128, p. 137
TEKS 2.13.B	develop and follow a research plan with adult assistance	p. 40, p. 48, p. 50, p. 52, p. 62
TEKS 2.13.C	identify and gather relevant sources and information to answer the questions	p. 52, p. 62, p. 63, p. 64, p. 76, p. 78, p. 85, p. 87, p. 88, p. 96, p. 97, p. 104, p. 112, p. 113, p. 114, p. 126, p. 127, p. 128, p. 136, p. 137, p. 138, p. 146, p. 147, p. 148
TEKS 2.13.D	identify primary and secondary sources	p. 52, p. 62, p. 63, p. 78, p. 85, p. 87, p. 104, p. 112, p. 113
TEKS 2.13.E	demonstrate understanding of information gathered	p. 160, p. 163
TEKS 2.13.F	cite sources appropriately	
TEKS 2.13.G	use an appropriate mode of delivery, whether written, oral, or multimodal, to present results	p. 160

ENGLISH LANGUAGE PROFICIENCY STANDARDS - GRADE 2

Unit 11		Correlation—Teacher's Guide
(1) Cross-curricular second language acquisition/learning strategies. The ELL uses language learning strategies to develop an awareness of his or her own learning processes in all content areas. In order for the ELL to meet grade-level learning expectations across the foundation and enrichment curriculum, all instruction delivered in English must be linguistically accommodated (communicated, sequenced, and scaffolded) commensurate with the student's level of English language proficiency. The student is expected to:		
ELPS 1.A	use prior knowledge and experiences to understand meanings in English	p. 19, p. 28
ELPS 1.B	monitor oral and written language production and employ self-corrective techniques or other resources	
ELPS 1.C	use strategic learning techniques such as concept mapping, drawing, memorizing, comparing, contrasting, and reviewing to acquire basic and grade-level vocabulary	
ELPS 1.D	speak using learning strategies such as requesting assistance, employing nonverbal cues, and using synonyms and circumlocution (conveying ideas by defining or describing when exact English words are not known)	
ELPS 1.E	internalize new basic and academic language by using and reusing it in meaningful ways in speaking and writing activities that build concept and language attainment	
ELPS 1.F	use accessible language and learn new and essential language in the process	
ELPS 1.G	demonstrate an increasing ability to distinguish between formal and informal English and an increasing knowledge of when to use each one commensurate with grade-level learning expectations	
ELPS 1.H	develop and expand repertoire of learning strategies such as reasoning inductively or deductively, looking for patterns in language, and analyzing sayings and expressions commensurate with grade-level learning expectations	
(2) Cross-curricular second language acquisition/listening. The ELL listens to a variety of speakers including teachers, peers, and electronic media to gain an increasing level of comprehension of newly acquired language in all content areas. ELLs may be at the beginning, intermediate, advanced, or advanced high stage of English language acquisition in listening. In order for the ELL to meet grade-level learning expectations across the foundation and enrichment curriculum, all instruction delivered in English must be linguistically accommodated (communicated, sequenced, and scaffolded) commensurate with the student's level of English language proficiency. The student is expected to:		
ELPS 2.A	distinguish sounds and intonation patterns of English with increasing ease	p. 76
ELPS 2.B	recognize elements of the English sound system in newly acquired vocabulary such as long and short vowels, silent letters, and consonant clusters	
ELPS 2.C	learn new language structures, expressions, and basic and academic vocabulary heard during classroom instruction and interactions	p. 19, p. 28, p. 38, p. 147, p. 153, p. 158

ENGLISH LANGUAGE PROFICIENCY STANDARDS - GRADE 2

Unit 11		Correlation—Teacher's Guide
ELPS 2.D	monitor understanding of spoken language during classroom instruction and interactions and seek clarification as needed	p. 112
ELPS 2.E	use visual, contextual, and linguistic support to enhance and confirm understanding of increasingly complex and elaborated spoken language	p. 76, p. 127
ELPS 2.F	listen to and derive meaning from a variety of media such as audio tape, video, DVD, and CD-ROM to build and reinforce concept and language attainment	p. 112
ELPS 2.G	understand the general meaning, main points, and important details of spoken language ranging from situations in which topics, language, and contexts are familiar to unfamiliar	p. 87, p. 97
ELPS 2.H	understand implicit ideas and information in increasingly complex spoken language commensurate with grade-level learning expectations	
ELPS 2.I	demonstrate listening comprehension of increasingly complex spoken English by following directions, retelling or summarizing spoken messages, responding to questions and requests, collaborating with peers, and taking notes commensurate with content and grade-level needs	
(3) Cross-curricular second language acquisition/speaking. The ELL speaks in a variety of modes for a variety of purposes with an awareness of different language registers (formal/informal) using vocabulary with increasing fluency and accuracy in language arts and all content areas. ELLs may be at the beginning, intermediate, advanced, or advanced high stage of English language acquisition in speaking. In order for the ELL to meet grade-level learning expectations across the foundation and enrichment curriculum, all instruction delivered in English must be linguistically accommodated (communicated, sequenced, and scaffolded) commensurate with the student's level of English language proficiency. The student is expected to:		
ELPS 3.A	practice producing sounds of newly acquired vocabulary such as long and short vowels, silent letters, and consonant clusters to pronounce English words in a manner that is increasingly comprehensible	
ELPS 3.B	expand and internalize initial English vocabulary by learning and using high-frequency English words necessary for identifying and describing people, places, and objects, by retelling simple stories and basic information represented or supported by pictures, and by learning and using routine language needed for classroom communication	
ELPS 3.C	speak using a variety of grammatical structures, sentence lengths, sentence types, and connecting words with increasing accuracy and ease as more English is acquired	p. 163
ELPS 3.D	speak using grade-level content area vocabulary in context to internalize new English words and build academic language proficiency	

ENGLISH LANGUAGE PROFICIENCY STANDARDS - GRADE 2

Unit 11		Correlation—Teacher's Guide
ELPS 3.E	share information in cooperative learning interactions	p. 49
ELPS 3.F	ask and give information ranging from using a very limited bank of high-frequency, high-need, concrete vocabulary, including key words and expressions needed for basic communication in academic and social contexts, to using abstract and content-based vocabulary during extended speaking assignments	
ELPS 3.G	express opinions, ideas, and feelings ranging from communicating single words and short phrases to participating in extended discussions on a variety of social and grade-appropriate academic topics	
ELPS 3.H	narrate, describe, and explain with increasing specificity and detail as more English is acquired	p. 112, p. 137
ELPS 3.I	adapt spoken language appropriately for formal and informal purposes	
ELPS 3.J	respond orally to information presented in a wide variety of print, electronic, audio, and visual media to build and reinforce concept and language attainment	
(4) Cross-curricular second language acquisition/reading. The ELL reads a variety of texts for a variety of purposes with an increasing level of comprehension in all content areas. ELLs may be at the beginning, intermediate, advanced, or advanced high stage of English language acquisition in reading. In order for the ELL to meet grade-level learning expectations across the foundation and enrichment curriculum, all instruction delivered in English must be linguistically accommodated (communicated, sequenced, and scaffolded) commensurate with the student's level of English language proficiency. For kindergarten and grade 1, certain of these student expectations apply to text read aloud for students not yet at the stage of decoding written text. The student is expected to:		
ELPS 4.A	learn relationships between sounds and letters of the English language and decode (sound out) words using a combination of skills such as recognizing sound-letter relationships and identifying cognates, affixes, roots, and base words	
ELPS 4.B	recognize directionality of English reading such as left to right and top to bottom	p. 63
ELPS 4.C	develop basic sight vocabulary, derive meaning of environmental print, and comprehend English vocabulary and language structures used routinely in written classroom materials	
ELPS 4.D	use prereading supports such as graphic organizers, illustrations, and pretaught topic-related vocabulary and other prereading activities to enhance comprehension of written text	p. 49, p. 127, p. 147, p. 153, p. 158
ELPS 4.E	read linguistically accommodated content area material with a decreasing need for linguistic accommodations as more English is learned	p. 137

ENGLISH LANGUAGE PROFICIENCY STANDARDS - GRADE 2

Unit 11		Correlation—Teacher's Guide
ELPS 4.F	use visual and contextual support and support from peers and teachers to read grade-appropriate content area text, enhance and confirm understanding, and develop vocabulary, grasp of language structures, and background knowledge needed to comprehend increasingly challenging language	
ELPS 4.G	demonstrate comprehension of increasingly complex English by participating in shared reading, retelling or summarizing material, responding to questions, and taking notes commensurate with content area and grade level needs	p. 76
ELPS 4.H	read silently with increasing ease and comprehension for longer periods	
ELPS 4.I	demonstrate English comprehension and expand reading skills by employing basic reading skills such as demonstrating understanding of supporting ideas and details in text and graphic sources, summarizing text, and distinguishing main ideas from details commensurate with content area needs	p. 87, p. 97
ELPS 4.J	demonstrate English comprehension and expand reading skills by employing inferential skills such as predicting, making connections between ideas, drawing inferences and conclusions from text and graphic sources, and finding supporting text evidence commensurate with content area needs	p. 38, p. 63
ELPS 4.K	demonstrate English comprehension and expand reading skills by employing analytical skills such as evaluating written information and performing critical analyses commensurate with content area and grade-level needs	
(5) Cross-curricular second language acquisition/writing. The ELL writes in a variety of forms with increasing accuracy to effectively address a specific purpose and audience in all content areas. ELLs may be at the beginning, intermediate, advanced, or advanced high stage of English language acquisition in writing. In order for the ELL to meet grade-level learning expectations across foundation and enrichment curriculum, all instruction delivered in English must be linguistically accommodated (communicated, sequenced, and scaffolded) commensurate with the student's level of English language proficiency. For kindergarten and grade 1, certain of these student expectations do not apply until the student has reached the stage of generating original written text using a standard writing system. The student is expected to:		
ELPS 5.A	learn relationships between sounds and letters of the English language to represent sounds when writing in English	
ELPS 5.B	write using newly acquired basic vocabulary and content-based grade-level vocabulary	p. 49
ELPS 5.C	spell familiar English words with increasing accuracy, and employ English spelling patterns and rules with increasing accuracy as more English is acquired	p. 127

ENGLISH LANGUAGE PROFICIENCY STANDARDS - GRADE 2

Unit 11		Correlation—Teacher's Guide
ELPS 5.D	edit writing for standard grammar and usage, including subject-verb agreement, pronoun agreement, and appropriate verb tenses commensurate with grade-level expectations as more English is acquired	
ELPS 5.E	employ increasingly complex grammatical structures in content area writing commensurate with grade-level expectations such as (i) using correct verbs, tenses, and pronouns/antecedents; (ii) using possessive case (apostrophe -s) correctly; and, (iii) using negatives and contractions correctly	
ELPS 5.F	write using a variety of grade-appropriate sentence lengths, patterns, and connecting words to combine phrases, clauses, and sentences in increasingly accurate ways as more English is acquired	p. 19, p. 28, p. 112, p. 137
ELPS 5.G	narrate, describe, and explain with increasing specificity and detail to fulfill content area writing needs as more English is acquired	p. 38, p. 87, p. 97, p. 147, p. 153, p. 158

ISBN 979-8-89072-277-5

Printed in the USA (**include any other requirements**)