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| **Name of Lesson** |  **Building Vocabulary and Analyzing Illustrations (6)** |
| **Materials** | * Posted Essential Questions for Unit 3
* “Firsts in Flight,” Wonders Reading-Writing Workshop, Unit 4, Week 4, Pages 304-307
* The Future of Flight, Leveled Reader
* Devices
* Online program, Wixie
* Technology Connection: Discovery Education video, “Greatest Inventions with Bill Nye: Transportation” <http://app.discoveryeducation.com/search?Ntt=airplane>
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| **Essential Questions** | Essential Question 1: How can solving problems lead to new ideas?Essential Question 2: What is the relationship between invention and innovation? |
| **Objectives** | Students will use information gained from the photographs and illustrations in “Firsts in Flight” to explain how, where, and when early flights took place. |
| **Common Core Standards** | **RI.3.1** Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers. **RI.3.4** Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic of subject area.**RI.3.7** Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur). |
| **ISTE Standards** | 1. Creativity and Innovation: Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.
2. Apply existing knowledge to generate new ideas, products, or processes
3. Create original works as a means of personal or group expression
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| **Procedures** | 1. Introduce EQ2.
	* Display and define *invention* and *innovation* with students to distinguish the differences between them.
		+ Invention is the creation of a product or introduction of a process for the first time.
		+ Innovation is an improvement or modification to something already created.
	* Which occurs first—invention or innovation? Could there be more than one innovation or improvement to an invention?
2. Have students discuss how inventors learned to fly, using background knowledge acquired from flipped learning. In this lesson, students will read about the invention of the first airplane and how innovations were made.
3. Display and state the student learning goal.
4. Examine the photographs on pages 305 – 306.

**\*\*\*Students may choose to use textbook, or access text on their device.*** + What can you see in the photographs? (*an aircraft; two men*)
	+ What text feature helps us gain additional knowledge about these photographs? (*The captions tell us that the aircraft is the Wright Flyer in 1903 at Kitty Hawk and that the two men are Orville and Wilbur Wright.*)
1. Read and discuss the introduction to “Firsts in Flight” on pages 305 - 306.
	* Develop the meaning of the word *motion*.
		+ Explain that motion is from the Latin *movere*, which means *to move*.
2. Have students refer back to the photograph on page 305 to compare and contrast the Wright Flyer with modern-day airplanes.
	* How do the photographs help us understand when these early flights took place? (*The brothers are wearing clothing from the early twentieth century; the caption for the photograph on page 305 tells us that the photograph was taken in 1903.*)
	* Why are these photographs included? (*The photograph of the Wright Flyer shows authenticity—the reader can see what the aircraft actually looked like! The photograph of the Wright brothers gives us a human connection—these were real people who worked through the often frustrating invention process to bring us human flight.*)
3. Have students work with partners to view and discuss the illustrations on pages 307 – 308. How do these photographs set a purpose for reading?
	* Have students generate questions—based upon these illustrations—to prepare for reading.
4. Read and discuss the rest of “Firsts in Flight” on pages 307-308.
	* Display the vocabulary cards for *launched*, *conquered*, and *passenger* as the words are encountered in the text.
	* Have students determine the meaning of the words in context.
	* Use words authentically in discussion and encourage students to use them in speaking and writing.
5. Summarize the learning.
	* Information gained from illustrations and photographs helps us answer questions about a text.
6. Review expectations for applied and independent learning.
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| **Assessment** | **Original Assessment without Technology:** Reader Response Log(s): Explain how one of the illustrations or photographs on pages 307 – 308 helps you understand where, when, or how early flights took place.**New Assessment with Technology**: Students will create an illustration using the program, Wixie, that would be helpful to have in the text. They will explain how this new illustration helps them understand where, when, or how early flights took place. |