F@CUS READERS

Lesson Plan

Airplanes of the Past

Book: *Inventing Airplanes* **Series:** Amazing Inventions

Level: Beacon

Objective

To help students practice reading and answering questions about a short online article.

Supplies

- Inventing Airplanes book
- "History of Aircraft" page from the DK Findout website: https://www.dkfindout.com/us/transportation/history-aircraft/
- Computer access for students
- · Paper and pencils

Before the Activity

Read the *Inventing Airplanes* book out loud, or assign it to students to read on their own.

Activity

Inventing Airplanes describes when and how people created the first airplanes, as well as how planes have changed over time. In this activity, students will take a closer look at some important aircraft from history. Divide students into five groups, and help each group navigate to the "History of Aircraft" page on the DK Findout website. Assign each group one of the five types of historic aircraft listed on this web page: balloons, early gliders, Wright Flyer, airliners, and first jets.

Students should click through to the full page about their group's assigned type of aircraft. They should read the paragraph on this page, and they should also click on all the labels. Then, each group of students should write three or four sentences to share what they learned with the rest of the class. These sentences should answer the following questions:

- When was this type of aircraft first invented?
- How did this type of aircraft fly and steer?
- Why was this type of aircraft important?

Give students several minutes to read and write. Then come back together as a class. For each type of aircraft, invite a volunteer to read his or her group's sentences out loud.

Evaluation

Collect each group's sentences at the end of the activity, using the following sample answers to give groups 2 points for each correct answer, for up to 6 points total.

Balloons

- 1. Balloons first carried passengers in 1783.
- 2. A large balloon filled with gas (usually hot air or hydrogen). This gas was lighter than air, which caused the balloon to float. Because they floated in the wind, balloons were hard to steer.
- 3. Balloons were the first aircraft to carry people.

Early Gliders

- 1. The first glider was made in 1853.
- 2. Long wings helped gliders soar on the wind. Pilots moved their bodies to steer.
- 3. Gliders were the first heavier-than-air craft.

Wright Flyer

- 1. The Wright Flyer was made in 1903.
- 2. The plane got power from an engine and two propellers. To steer, the pilot pulled wires that twisted the wings and moved the rudder.
- 3. The Wright Flyer made the first successful airplane flight.

Airliners

- 1. Airliners were first used after World War I (1914–1918) and were common by the mid-1920s.
- 2. Airliners got power from engines and propellers. To steer, pilots used movable parts on the wings (ailerons) and the tail (elevators and rudder).
- 3. Airliners helped make traveling by air safe, comfortable, and reliable.

First Jets

- 1. Jet engines were invented in the 1930s, and the first jet aircraft was made in 1939.
- 2. A jet engine shoots out a stream of hot gas to push the plane forward. Some jet engines use fans to add more force.
- 3. Most airplanes today still use jet engines.

Standards

This lesson may be used to address the Common Core State Standards' reading standards for informational text, grade 3 (RI 3.1), and the National Council for the Social Studies' standard 8.