

Aerospace Engineering
Gant, Hook, Windes
Lesson: 4-6-2020

Learning Target:

Interpreting an exhibit or artifact by asking the who, what, when, where, why and how related to the exhibit or artifact

Let's Get Started:

Watch Video: [If These Planes Could Talk](#)

Bell Work:

In 1 minute, write down every type of plane that you can think of.

The Wright brothers inaugurated the aerial age with the world's first successful flights of a powered heavier-than-air flying machine. The Wright Flyer was the product of a sophisticated four-year program of research and development conducted by Wilbur and Orville Wright beginning in 1899. After building and testing three full-sized gliders, the Wrights' first powered airplane flew at Kitty Hawk, North Carolina, on December 17, 1903, making a 12-second flight, traveling 36 m (120 ft), with Orville piloting. The best flight of the day, with Wilbur at the controls, covered 255.6 m (852 ft) in 59 seconds.



(Photo courtesy of Wikipedia, GNU Free Documentation License)

**So what is the who, what, when, where, why and how
of the Wright Flyer?**

The Who and What

Who developed the aircraft? The Wright Brothers, Orville and Wilbur Wright

Who used the aircraft? The Wright Brothers, Orville and Wilbur Wright

Who is associated with this aircraft? (country, group, or individual) Orville and Wilbur Wright, from the United States of America; further research indicates they were from Dayton, Ohio

What was the function of the aircraft? (note any markings or inscriptions) To become the world's first successful powered heavier-than-air flying machine; to contribute to furthering the science of aviation

What materials are used? (wood, fabric, metal) The airframe was made of wood with muslin fabric covering the wings; the engine crankcase was aluminum

What propulsion system does this aircraft use? (propeller or jet; single or multiple engines) Single combustion engine; 12-horsepower Wright horizontal four cylinder engine with twin propellers

The When and Where

When was the aircraft produced? 1903
When was the aircraft used? 1903

When was the aircraft retired? Unknown from the data provided; further research shows it was damaged beyond repair on the same day of its inaugural flight, Dec 17, 1903

Where was the aircraft produced? Unknown from the data provided; further research indicates it was built in the Wright Brothers' bicycle shop in Dayton, OH

Where was the aircraft registered? This aircraft was never registered; it was built before the registration system was established

Where was the aircraft flown? Kittyhawk, NC

The Why and How

Why would a museum keep this airplane? It was the first powered airplane to fly

Why is this airplane important to local, regional, national or international history? It was used for the first flight in the world

How was it used? It was used as a test plane, flown in a dirt field several times over the course of one day (December 17, 1903)

Now I would like you to pick out your plane and answer the who, what, when, where, why and how over your chosen plane.