

## Lesson #113

### Orville (1871–1948) and Wilbur (1867–1912) Wright, Inventors

The Wright brothers are world famous for “first flight.” During the late 1800s, however, Orville and Wilbur were just regular kids growing up in Dayton, Ohio. Their father was a minister who moved the family often but always returned to Dayton. Although the Wrights were not well-off, they had two libraries in their home. The brothers were encouraged to study. They were smart and excelled in math and science. As

young men, they designed and built a printing press. They opened a print shop and published church pamphlets, bicycle catalogs, and newspapers.

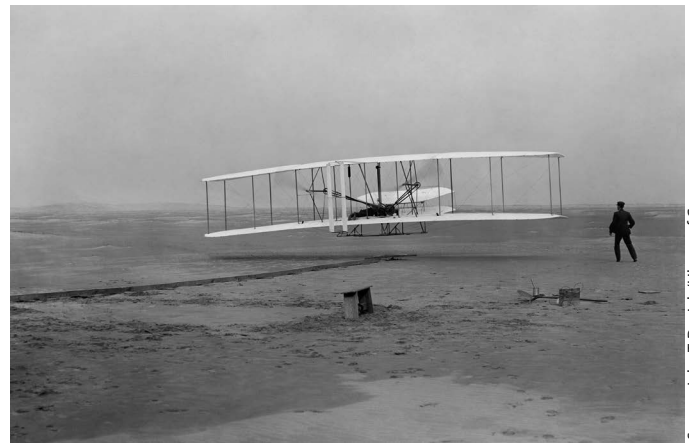
In 1892, the Wright brothers saw a great opportunity. Bicycling was becoming more popular. They opened a shop where they rented, sold, and repaired bicycles. They even designed their own line of bicycles. The business was profitable and provided a good income. Because of this, the men were able to explore something they were very interested in: flying.

The Wright brothers read everything they could about flight. They studied birds and flew kites. They talked with engineers and built models. They experimented with various contraptions. By 1899, they had built their first **glider**<sup>1</sup>. They flew it like a kite. The following year, they built a glider that could carry a person. Finally, the Wright brothers searched for the perfect place to launch an aircraft.

Ohio was flat and not very windy. The brothers knew this was not ideal for testing their glider. So, they went to the Outer Banks of North Carolina, a windy place with wide open spaces. They continued their experiments there.

When they felt they had mastered air flow and other conditions for flying, they added a gas engine. On December 17, 1903, the Wright brothers changed the world forever. In Kitty Hawk, North Carolina, they flew the very first gas-powered aircraft.

As a result of their great accomplishment, the Wright brothers became famous. In 1908, they received a contract to build planes for the US Army and an offer to build planes for France. They worked to improve flight technology. In 1909, Wilbur and Orville set up the Wright Company. Its factory built aircraft in Dayton, Ohio.



First successful flight of the Wright Flyer

Source: John T. Daniels/Library of Congress

1 **glider**: aircraft without an engine

1. Check the things that most likely led to the Wright brothers' success.

\_\_\_\_\_ The NASA Glenn Research Center came to Ohio.  
\_\_\_\_\_ Both men were imaginative and hardworking.  
\_\_\_\_\_ Ohio was flat and not very windy.  
\_\_\_\_\_ There were two libraries in the Wright home.  
\_\_\_\_\_ They studied and read all they could about flight.

2. What entrepreneurial characteristics did the Wright brothers have?

\_\_\_\_\_ They recognized opportunities (bicycling was becoming popular).  
\_\_\_\_\_ They started a business to make a profit.  
\_\_\_\_\_ They took risks.  
\_\_\_\_\_ They enjoyed riding bicycles.  
\_\_\_\_\_ They opened a print shop and a bicycle shop.

3. List three Ohio industries that provide jobs for Ohioans.

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4. The Battle of Fallen Timbers was a conflict between \_\_\_\_\_. (See Lesson #70.)

A) the North and the South                      C) the British and the French  
B) settlers and Indians                            D) American colonists and the British

5. These two groups were fighting over \_\_\_\_\_.

A) land in the Ohio Territory                      C) freedom of religion  
B) land east of the Appalachians                      D) taxation without representation

6. Which were characteristics of the North in the 1800s?

\_\_\_\_\_ land covered with forests                      \_\_\_\_\_ some small towns  
\_\_\_\_\_ large port cities    \_\_\_\_\_ plantations with cash crops

7. Which of these is a major export from Ohio?

aircraft parts                      salmon                      gold                      tobacco