

The Wright Brothers

The Wright Brothers were brothers from Ohio who invented the first successful airplane.

Wilbur and Orville Wright were born in the Midwest in the mid-1800s. Wilbur was born in 1867 in Indiana; Orville in 1871 in Ohio. The two brothers were interested technology and mechanics from an early age – Orville had designed and built his own printing press by his junior year of high school.

Bicycles became a big trend in the late 1800s, so the brothers used their mechanical knowledge to open a bicycle repair shop. Soon after, they started making and selling their own bicycles for people to buy. The more they worked around bicycles, the more they became interested in transportation and, eventually, the idea of human flight. At the time, people had only recently begun experimenting with flight. People around the world were building gliders and other flying contraptions, and Orville and Wilbur decided to see if they could use their skills to make a working flying machine.

Before building any airplanes, Orville and Wilbur read everything they could find on flying and flight. This made Wilbur and Orville different from the other aircraft inventors at the time: While other flying machine-makers were seen as “mad scientists,” building their airplanes as soon as they thought of the idea for it, Wilbur and Orville were careful and methodical, and took the time to research their ideas before building a prototype. Instead of studying just airplanes and aerodynamics, they also studied the way birds moved when they flew. This gave them the idea to use “wing warping” in their models, which let the wings of their planes and gliders move. They discovered that by allowing the wings of the aircraft to twist, they could change the direction it was flying in.

After testing their theory with kites, they went to Kitty Hawk, North Carolina, to try it on real aircraft. They began making test flights in 1900 with gliders they had made. After making changes to their design based on observations made at Kitty Hawk, they fashioned a plane with a motor that stayed in the air for 12 seconds and flew for 120 feet, becoming the first recorded instance of human flight. Their 1903 flyer is considered to be the first heavier-than-air, power-controlled aircraft like the ones we use today.



Make an Airplane!

Be like the Wright Brothers and use the scientific method to design an airplane. Use a sheet of scratch paper to make a paper airplane in any shape you choose. Record your findings in the chart below.

Question: Do you think your airplane will fly? Why or why not?

Research: Find information in books or online that discusses flying and aerodynamics.

Hypothesis: State whether you think your airplane will fly.

Test: Perform your test.

Data: Record your data in the chart below.

	Flight Length	Time
Test 1		
Test 2		
Test 3		

Conclusion: The results of your experiment.

