



Famous aviators and aviatrixes: The Wright Brothers

English worksheets from urbrainy.com



'Wright Flyer I', 17th December 1903, Orville piloting, Wilbur running at wing tip. By John T. Daniels

This image is available from the United States Library of Congress's Prints and Photographs division under the digital ID ppprs.00626. This tag does not indicate the copyright status of the attached work. A normal copyright tag is still required. See Commons:Licensing for more information - <http://www.loc.gov/pictures/resource/ppprs.00626/>, Public Domain, <https://commons.wikimedia.org/w/index.php?curid=6224251>

Wilbur was born on 16th April 1867 in Ohio and his brother Orville was born on 19th August 1871 in Indiana, USA. It is thought that they became interested in flying machines after their father gave them a toy helicopter in 1878 which was made from paper, cork and bamboo and had a rubber band to twirl the rotor. They played with it so much that eventually it broke and so they built their own. In 1892 the Wright brothers opened a bicycle shop where they sold, repaired and built bicycles. This business venture afforded them the money to fund their interest in flying machines.

Hang gliders were being flown in the 1890's and it was at this time that the Wright brothers began to experiment with mechanical flying machines. They were convinced that in order to have a safe and successful flight the pilot must have full control. They studied birds and realised that they made their bodies roll right or left by changing the angle of the ends of their wings. By 1902 they had built a glider which enabled the pilot to have real control. The longest glide that they were able to achieve at this time was 26 seconds. After making over 700 trips in this glider they felt ready to build a powered flying machine.

Their first flying machine 'Wright Flyer I' was built from wood and muslin (fabric) and they constructed the engine in their bicycle shop. 'Wright Flyer I' was eventually ready on 14th December 1903 and they tossed a coin to see who would make the flight at the testing ground at Kitty Hawk, North Carolina. Wilbur won but the flight only lasted for 3 seconds because he stalled the engine after take-off. Orville was next and his flight took place on 17th December 1903. He flew for 12 seconds at 6.8 mph. Both brothers made two flights each that day, but unfortunately a gust of wind caused severe damage to their aircraft and it was unable to fly again. The 'Wright Flyer I' is now housed at the Smithsonian Institute in Washington DC.

They built the 'Wright Flyer II' in 1904. The brothers made many short flights and then tried using a catapult to help them take-off. Wilbur made history on 20th September 1904 when he flew the first complete circle by a manned machine heavier than air. By the end of the year both Wilbur and Orville had made flights longer than 5 minutes and covered over 3 miles.

1905 saw the Wright brothers build another aircraft, the 'Wright Flyer III'. After making some changes to the design they made several flights lasting between 17 and 38 minutes. Wilbur made the longest of these flights which was also witnessed by their father, friends and local farmers. When reporters showed up the following day Wilbur and Orville refused to fly their plane for them because they had already achieved what they had set out to do; making a practical flying machine that they could sell. However, the lack of publicity meant that few people knew of the flights and many did not believe them, calling them bluffers.

The Wright brothers became successful in selling their aircraft when they further developed it and visited Europe. They became celebrities after taking passengers such as journalists, statesmen and officials on flights.



Famous aviators and aviatrixes: The Wright Brothers

English worksheets from urbrainy.com



Questions:

1. What was the nationality of Wilbur and Orville Wright?
.....
.....
2. What sparked their interest in flying machines?
.....
.....
3. What occupation did they have that helped develop their understanding of machines?
.....
.....
4. In what way did birds influence the construction of the machine?
.....
.....
5. What materials were used to build their first mechanical flying machine?
.....
.....
6. How did they decide who would be the first to pilot 'Wright Flyer I' at the testing ground at Kitty Hawk?
.....
.....
7. What happened to 'Wright Flyer I' after they had both had a couple of flights?
.....
.....
8. In what way did Wilbur Wright make history on 20th September 1904?
.....
.....
9. Why do you think people called the Wright brothers bluffers?
.....
.....
10. What was the turning point for them having success in selling their aircraft?
.....
.....
11. Imagine you were a passenger on one of their first flights and describe the experience.
.....
.....



Answers:

1. Wilbur and Orville Wright were American.
2. A toy helicopter given to them by their father sparked their interest in flying.
3. They owned a bicycle shop where they repaired and built their own bicycles which would have helped develop their understanding of machines.
4. They noticed that birds made their bodies roll right or left by changing the angle of the ends of their wings which influenced how the Wright brothers constructed their flying machine.
5. Their first mechanical flying machine was built from wood and muslin (fabric).
6. They tossed a coin to decide who would be the first to pilot 'Wright Flyer I' at the testing ground at Kitty Hawk and Wilbur won.
7. After Wilbur and Orville had both had a couple of flights in 'Wright Flyer I' a gust of wind caused severe damage to their aircraft and it was unable to fly again.
8. Wilbur Wright made history on 20th September 1904 when he flew the first complete circle by a manned machine heavier than air.
9. An answer that suggests that people called the Wright brothers bluffers because there was no photographic evidence or public viewings of their flights so people did not believe that they had actually taken place.
10. The turning point for them to successfully sell their aircraft was when they further developed it, visited Europe and took passengers for flights.
11. Any suitable answer.