Airplane Technology

Level H/I



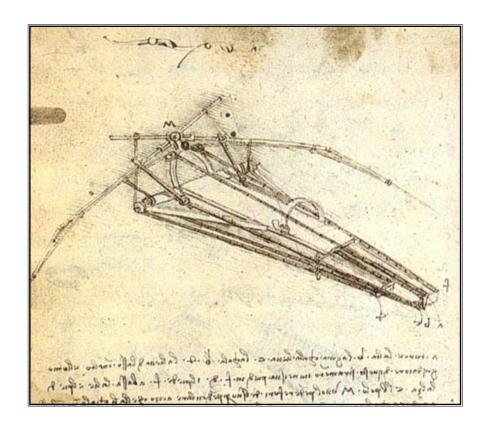
by Kathy Staugler

Illustrated by Amanda Noss

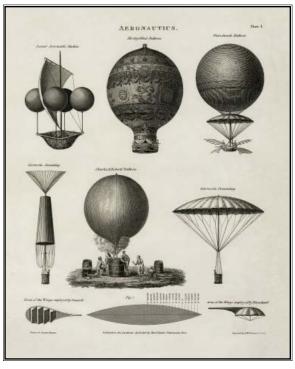
Today, there are almost 20,000 airports in the United States. Because an airplane can travel very fast, people fly on airplanes for their jobs and for vacations. It would take longer to travel in a car, a bus or a train. People go to an airport and get to another city quickly. Airplane

technology
has changed
the way
people travel.



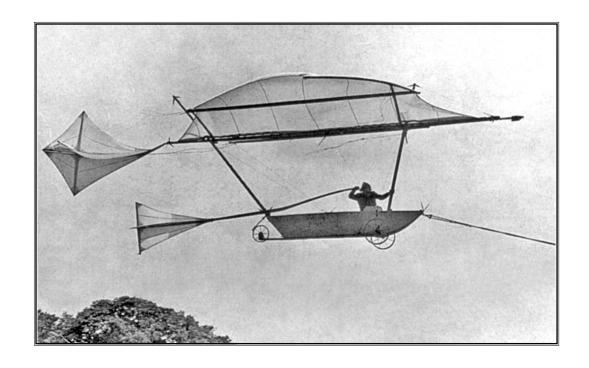


Long ago, people wanted to be able to fly. Leonardo da Vinci was an artist and a scientist. He watched birds. He drew pictures of a flying machine that looked like a bird. Leonardo's idea would not have worked.



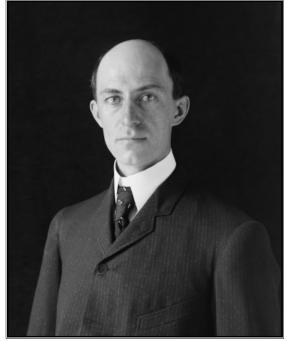


In 1783, two brothers from France invented the hot air balloon. Hot air is lighter than cold air. When hot air is put into the balloon, it will rise up. From a hot air balloon, people could look down from the sky for the first time.



In the 1800s, Sir George Cayley made a glider. A man could sit on the glider and move through the air. The glider was built with special wings that let the wind move the glider. The glider did not go very far, but it was this idea that started the idea for the airplane.

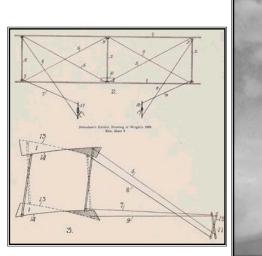


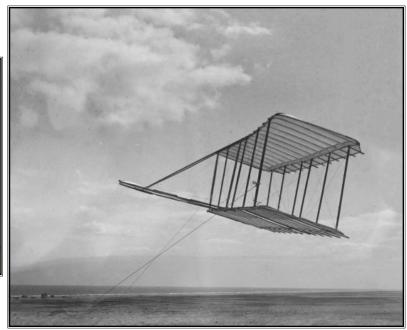


Orville Wright

Wilbur Wright

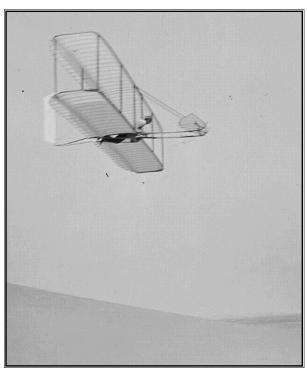
Orville and Wilbur Wright were brothers. As children, these brothers liked toys that could fly. They had a toy helicopter that moved when a rubber band was twisted. They liked to build and fly kites too. When they got older, Wilbur and Orville owned a bicycle shop.





Orville and Wilbur were interested in flying machines. They studied the glider. They made new ideas on how to make a flying machine. They made a large kite with wings. They used ropes to pull the kite in the air. Now they wanted to make this big kite into a glider.



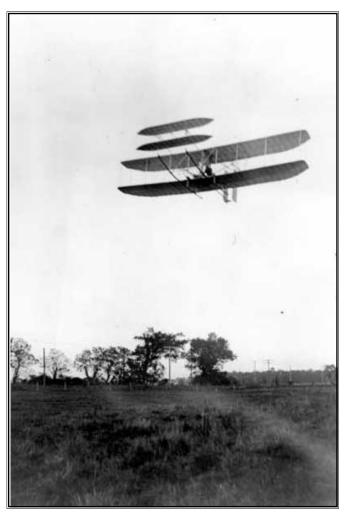


Wilbur and Orville built a big glider.

They wanted to find the perfect place to try it. They decided to go to Kitty Hawk, North Carolina. They flew their big glider. Sometimes it crashed and they had to repair it. Sometimes they made changes to the wings of the glider.

The Wright brothers wanted to put power in their glider. Again, they worked

on new ideas. In December 1903, Orville flew their new airplane, the Wright Flyer. The plane went into the air powered by the



engine that the brothers made. Flying was possible.



This first airplane built by Orville and Wilbur Wright was the beginning to the airplanes that we see today.

This first plane only carried one man.

New airplanes were built that carried passengers. By 1950, 100 people could ride on an airplane across the country.

The Boeing 777 is a very large

airplane. This plane has seats for 300

people. Many

airlines have

Boeing 777

planes to fly

people around



the world. Pilots control the airplane.

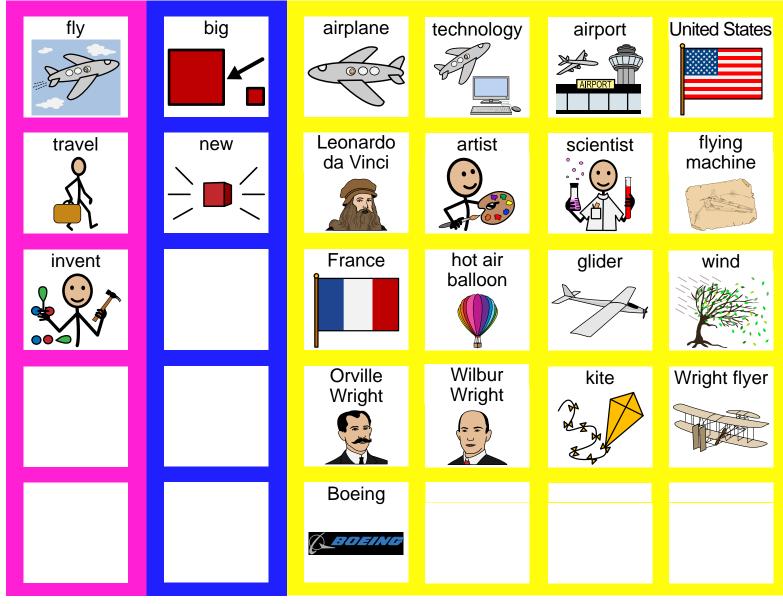
Flight attendants serve refreshments to the passengers. Movies are shown on the airplane. Technology has made air travel today a fun experience.





Airplane Technology





Index for Photographs

The images found in this lesson fall under a Creative Commons license. Please note the citation listed for each individual image below. For information on use or redistribution of any of these images, please visit: http://creativecommons.org/about/licenses/

- Cover, Page 1 http://viewology.net/wp-content/uploads/2010/09/SilkAir-9V-SLC-Airbus-A320-232_10044319.jpg
- Page 2 http://upload.wikimedia.org/wikipedia/commons/d/d4/Design_for_a_Flying_Machine.jpg
- Page 3 http://upload.wikimedia.org/wikipedia/commons/e/e6/Aeronautics2.jpg
- Page 3 http://upload.wikimedia.org/wikipedia/commons/9/96/Cloudhoppers.jpg
- Page 4 http://upload.wikimedia.org/wikipedia/en/c/c2/Cayley_Glider_Replica_Flown_By_Derek_Piggott_2.jpg
- Page 5 http://upload.wikimedia.org/wikipedia/commons/c/cb/Orville_Wright.jpg
- Page 5 http://upload.wikimedia.org/wikipedia/commons/7/77/Wilbur_Wright.jpg
- Page 6 http://upload.wikimedia.org/wikipedia/commons/e/e6/WrightBrothers1899Kite.jpg
- Page 6 http://upload.wikimedia.org/wikipedia/commons/8/88/WrightBrothers1900Glider.jpg
- Page 7 http://upload.wikimedia.org/wikipedia/commons/6/67/Wright_1901_glider_landing.jpg
- Page 7 http://upload.wikimedia.org/wikipedia/commons/0/0d/1902_WrightBrosGlider.jpg
- Page 8 http://upload.wikimedia.org/wikipedia/commons/5/54/Wright_Flyer_III_above.jpg
- **Page 9 -** http://upload.wikimedia.org/wikipedia/commons/6/69/Boeing_377_Stratocruiser_%28B-29%29_American_Over seas_1949-50.jpg
- Page 10 http://upload.wikimedia.org/wikipedia/commons/6/65/United_Airlines_B777-200_N780UA.jpg