

# Research Project

For this activity you will be researching an **Invention** related to Engineering Technology. Your research must be **no more** than one page and **no less** than 1/2 page of computer generated text. Your research will be collected, graded and then returned to you to keep in your Technology Notebooks. (It is your responsibility to store your work in a safe place, you will need it for a later assignment!) With the research you gather, you will eventually create a web page as a way of presenting your topic. I recommend looking at the examples on the Engineering Technology web site to get some ideas. Your web pages will eventually be published on the school web site and 6th grade students will use them to complete various technology projects. Keep in mind that this is a two-part assignment. For now, you are only to complete the research portion of the assignment. We will learn how to make a web page as a group later on.

## DIRECTIONS

You can do your research any way you see fit, but make sure you gather all the information listed under "**requirements**" and make sure the information is accurate. Try to make your web page fun and interesting to browse by finding interesting facts and/or neat pictures. Remember, 6th graders will be looking at this info, so think of a strategy that will keep them interested. As you are researching your topic, look for other interesting things that relate to your topic. (Later you will have to create links, and if you remember where you saw the interesting info, it will be easy to go back to get it.) Make a reference list of all the web addresses, books, periodicals, etc. that you used to gather your information. Refer to the "**How to make a Bibliography**" worksheet if you are not sure how to site references. Save all of your work to a disk and then print the final copy of your research and submit it to Mr. Whitman by the determined due date.

## HINTS

There are many ways to get information for a research project. You could use the library, periodicals, interviews, or the easiest and most popular way now is the Internet. If you choose to use the Internet, then check out the Engineering Technology web site for useful references, especially if you are having trouble finding information. You should find plenty of links that have information about inventors. For starters go to the following address:

[http://www.newton.k12.ma.us/bigelow/engineering\\_technology/](http://www.newton.k12.ma.us/bigelow/engineering_technology/)

Click on: "**For Students**" Here you will find links to information about inventors and also pre-made web buttons, backgrounds and graphics that you can import onto your web page.

## IMPORTANT

Simply printing an existing web site will not be acceptable for this assignment. The web research you hand in to me must be edited. You probably will not want, or need, all the information you gather, so weed out the boring stuff. I recommend using a word processing program, such as Microsoft Word or Claris Works, to type the information. (If you save a copy of your research to a disk, you will be able to copy and paste your information directly into the your web page later on. This makes creating your web page Real Easy!) Remember younger students will use this information, make it fun and interesting for them.

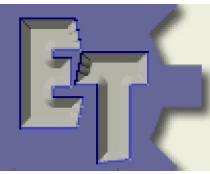
## Research Requirements / Points

- |    |  |           |
|----|--|-----------|
| 1. | Name of the invention  | 10 Points |
| 2. | Name of person(s) who invented it                                | 10 Points |
| 3. | Patent numbers (if applicable) and date it was invented          | 10 Points |
| 4. | Description of the invention                                     | 20 Points |
| 5. | Inventor biography (1 paragraph)                                 | 10 Points |
| 5. | Paragraph explaining how it has impacted on our lives            | 10 Points |
| 6. | Paragraph or time line explaining the evolution of the invention | 10 Points |
| 7. | A complete and accurate Bibliography (See hand-out)              | 20 Points |

## IMPORTANT!

- Your research **must be computer generated and printed**, no less that **1/2 page** and no more than **one page**, and should be presented in a format similar to that of the research example given.
- A picture of the inventor or invention is **not** required for the research part of this project. We will get pictures later.
- Your research will be collected, graded, and then given back to you. It is **your** responsibility to keep it in your Tech. notebook until you need it. If you saved the file to a disk, you can store the disk in your notebook as well.

**Research Due Date:** \_\_\_\_\_



# Research Worksheet

**This is a worksheet ONLY! The final draft must be computer generated**

**Name of the Invention:** \_\_\_\_\_.

**Date it was invented:** \_\_\_\_\_.

**Time line of important events:**

Date	Event
_____	_____.
_____	_____.
_____	_____.
_____	_____.
_____	_____.
_____	_____.
_____	_____.

**Date of patent and patent number:** \_\_\_\_\_.

**Description of the device, material or technique:** \_\_\_\_\_.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_.

**Invention impact on our lives:** \_\_\_\_\_.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_.

**Brief biography of the inventor (s):** \_\_\_\_\_.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_.

**Links, Photos, notes, etc.:**

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**Bibliography**

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# Airplane

## Inventor

Wilbur Wright Born April 16, 1867 - Died May 30, 1912  
Flying-Machine Airplane

## Patent Number(s)

821,393

## Inventor Biography

Orville and Wilbur Wright, American inventors and aviation pioneers, achieved the first powered, sustained, and controlled flight of an airplane. Wilbur first became interested in the idea of mechanical flight after reading of Otto Lilienthal's successful gliding experiments in Germany. From these studies and observations, the Wrights built their first machine in 1899. It was a biplane kite which they fitted with wings that could be mechanically twisted.

Before attempting a powered flight, they decided to master gliding and built three biplane gliders, which they flew at Kitty Hawk and Kill Devil Hills on the Outer Banks of North Carolina.

They completed their first powered machine, the Kitty Hawk, in 1903, and made history's first powered, sustained and controlled airplane flights from level ground without any assistance at takeoff on the morning of December 17, 1903. In 1908 they were able to conclude an agreement for production of the Wright airplane for the U. S. Army. Wilbur made the first public flight on August 8, 1908 in France and continued his exhibition flights there to the end of that year.

## Time Line

- December 17, 1903, the Wright Brothers display the first powered flight in a heavier-than-air machine.
- May 21, 1927, a young pilot named Charles Lindberg flew the first continent-to- continent non-stop flight in an airplane.
- During World War II, new innovations enabled fighter planes to go faster, higher, and further than ever before.
- In 1943, the first jet engine plane was built in the United States.
- The first supersonic passenger jet called the "Concorde" was made in 1967
- The year of 1969 marked the debut of a revolutionary aircraft, the Boeing 747, which is a wide body jet that seats about 450 people. The Boeing 747 was almost twice as big as the next biggest jet of the time.

## Invention Impact

They made history's first powered, sustained and controlled airplane flights from level ground without any assistance at takeoff.

## Bibliography

Hall of Fame Inventor Profiles "Airplane"  
[http://www.invent.org/hall\\_of\\_fame/157.html](http://www.invent.org/hall_of_fame/157.html) January 1996