

The Wright Brothers

Who Were the Wright Brothers?

Wilbur and Orville Wright were famous designers and inventors who grew up in Ohio, USA. Wilbur was born in 1867 and Orville was born years later in 1871. They are famous for being the first people to build and fly an aeroplane powered by an engine.

What Was Their Early Life Like?

Wilbur and Orville's father encouraged them to read lots of books and learn more about the world. He enjoyed thinking carefully about things and taught his children to do the same. Instead of going to university, Orville spent several summers learning the printing trade and, together, the brothers opened a printing shop. The brothers were well-known in their local area for the **printing presses** that they designed, built and sold. In 1892, the Wright brothers opened their own bicycle sales and repair shop. They used their profits from the shop to research flying machines.

Were the Wright Brothers the First People to Fly?

Before the Wright brothers, many people had explored different ways to fly. Leonardo Da Vinci was a famous artist who drew plans for flying machines in the 1700s. However, Da Vinci's machines were never built. Otto Lilienthal was a German inventor who designed and flew the first **glider**. He studied the way that birds flew and built gliders with similar wings. Otto was a great inspiration to the Wright brothers.

What Was the First Aeroplane Like?

Wilbur and Orville experimented with many different designs to try to make an aeroplane fly. They realised that the design of the wings was crucial to get the plane off the ground. They built wings with different lengths, shapes and tip designs to find out which would work the best. In 1903, they designed and built an aeroplane with wings, propellers and an engine. It also had rudder to help the pilot to steer. On 17th December 1903, the aeroplane flew for 12 seconds and there were five **spectators**.



What Happened after the First Flight?

After their first success, the brothers continued to build aeroplanes. By 1905, they had built an aeroplane that could fly for 39 minutes and it could even fly in circles. Wilbur and Orville became more successful while other people struggled to keep up with their designs. The brothers created aeroplanes for the US army that could fly for at least one hour with a pilot and a passenger. Years later, they opened a flight school in Ohio where pilots were trained. Modern designs of aeroplane wings are quite similar to their early sketches.

Glossary

glider

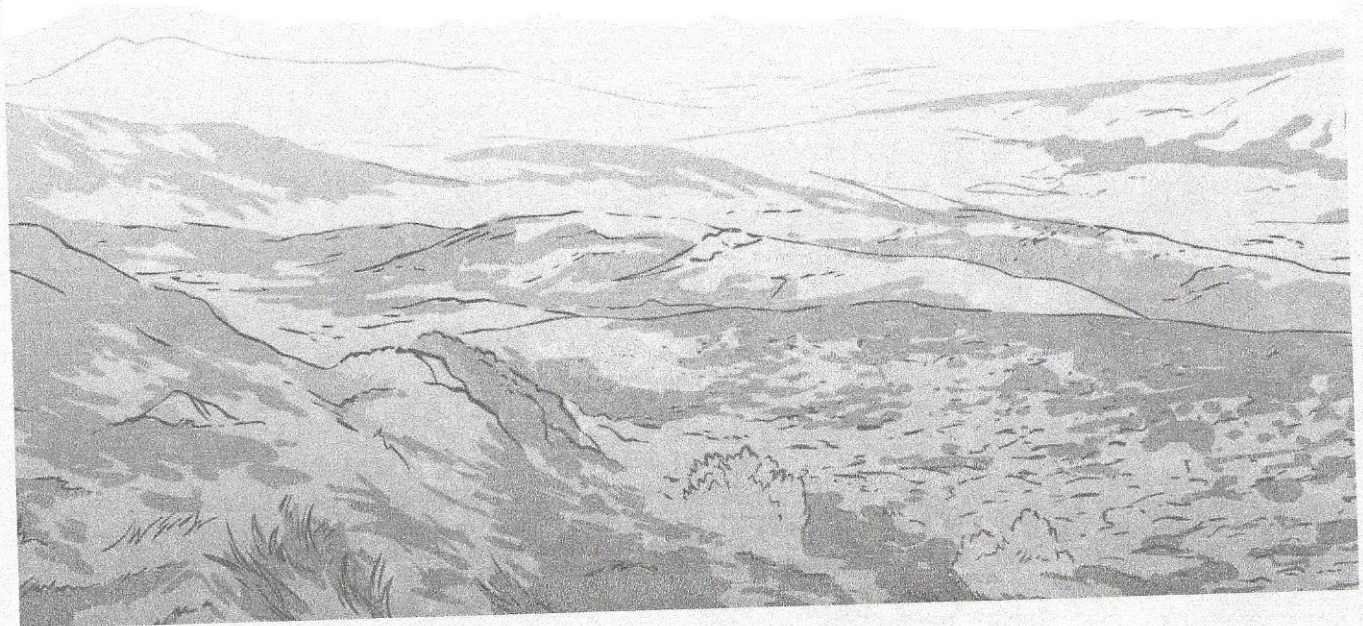
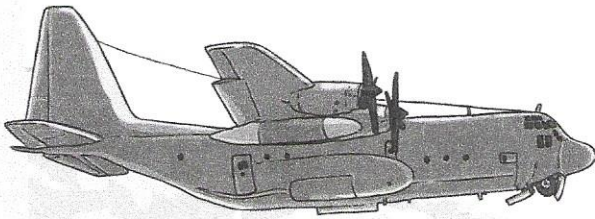
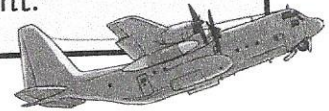
A light aircraft that flies without an engine.

printing press

A machine for printing text or pictures.

spectators

People who watch a show, game or event.



Questions

1. Where did the Wright brothers grow up?

- ☐ New York
- ☐ Ohio
- ☐ Florida
- ☐ Texas

2. Who designed and flew the first glider?

- ☐ Orville Wright
- ☐ Leonardo Da Vinci
- ☐ Otto Lilienthal
- ☐ Wilbur Wright

3. Draw **four** lines and complete the sentence.

In 1892, the
brothers opened...

After the first flight, ...

They realised that
the design of...

By 1905, they had
built an aeroplane...

the brothers carried
on building aeroplanes.

the wings
was important.

their own bicycle
repair shop.

that could fly for
39 minutes.

4. What did the brothers' father encourage them to do?

- ☐ Join the church.
- ☐ Go to university.
- ☐ Play a lot of sports.
- ☐ Read lots of books.

5. Find and copy one phrase which shows that Otto Lilienthal was important to the brothers.

6. Fill in the missing words.

Wilbur and Orville became more _____ while other people
_____ to keep up with their designs.

7. Explain and compare the inventions of the Wright brothers and Otto Lilienthal.

8. Predict how flying machines might change in the future.
