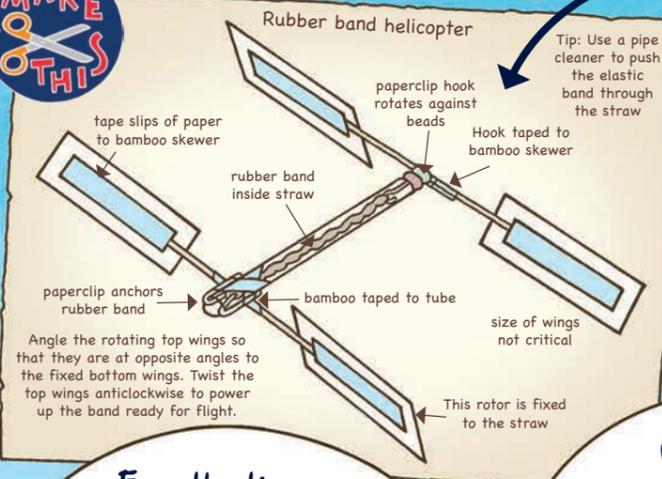


The Wright Brothers



Isabel Thomas soars through the remarkable story of the team behind the world's first powered flight.

Wilbur and Orville Wright grew up in the late 1800s, during the Industrial Revolution. When the boys were 12 and 7, their father gave them a toy helicopter powered by rubber bands. They decided to build copies they could experiment with. Why not use the sketch below to try making one yourself?

Their new aircraft used the controls they had perfected in their gliders, but had much bigger wings to lift the extra weight of the engine and propellers. By December 1903, the Wright Flyer was ready. The brothers took the plane to the wide, windy beach at Kitty Hawk, North Carolina, USA, where they had tested their gliders. After tossing a coin to see who would fly first, Orville took off...



In 1969, a piece of wood and fabric from the Wright Flyer was taken to the Moon by the crew of Apollo 11.

... and stayed up for just 12 seconds! But it was a great start.

For some years, I have believed that flight is possible for humans.

From the time we were little, Orville and I shared all our toys and talked about our thoughts and dreams. Nearly everything we did and invented was the result of discussions (and sometimes scraps!).

We were lucky enough to grow up in an environment where children were always encouraged a lot to pursue intellectual interests; to investigate whatever aroused curiosity.

They made three other flights that day. On the fourth attempt, Wilbur piloted the plane for 59 seconds, travelling 260 metres! As they talked about the successful flight, disaster struck. A gust of wind tipped the Flyer over and rolled it across the sand. The plane never flew again, but it had done its job.

Wilbur and Orville built their first glider in 1900. For the next three years, they improved their designs. They built a wind tunnel and tested up to 200 different wing shapes before they were happy! Once they had the perfect glider, they were ready for the next step: powered flight.

The Wright brothers had finally unlocked the secret of mechanical flight. The brothers travelled to Europe to demonstrate their invention. Interest in powered flight exploded and they returned to the USA as celebrities. In 1906, their patent was finally granted, and they began selling planes to customers, including the US military.

We packed our goods and returned home, knowing that the age of the flying machine had come at last.

The Wright brothers decided to use a petrol engine to power their plane. No one else could build them an engine light enough to get off the ground, so the brothers designed and built their own. They used the lightweight metal aluminium, which is still the main material used to build aircraft today.

In 1912, Wilbur died suddenly from typhoid. Orville sold their company and stopped flying in 1915, but he spent the next 33 years championing the development of flight. He even helped to design the world's first guided missile during World War 1. He watched as aeroplanes changed the world and made sure that the Wright brothers' contribution to the world was never forgotten.

Both brothers loved building and fixing things. In their 20s, they opened a bicycle shop. They even built 300 of their own bicycles – five of which are still around today. The brothers combined hands-on tinkering with scientific skill. When they decided to try and build a flying machine, they read everything they could about flight before carrying out their own experiments.