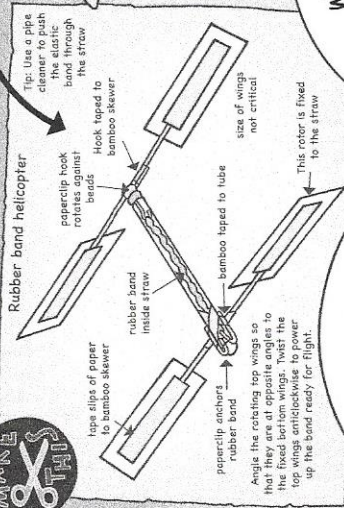


# The Wright Brothers



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.

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...

... 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.

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.

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.

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 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.

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

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.

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



# SENSATIONAL SCIENTISTS – THE WRIGHT BROTHERS

**Q1.** In what period of history were the Wright brothers born? (Not the date!)

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**Q2.** How old were they when they became interested in 'flight'?

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**Q3.** What does the word 'scraps' mean?

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**Q4.** Complete the grid below using information from the whole text. Either write a question or an answer depending on which section is missing. The first one has been done for you.

Question	Answer
How old were the Wright brothers when they owned a bicycle shop?	In their 20s.
What tragedy happened in 1912?	
	A piece of wood and fabric from the Wright Flyer.
Their patent was finally granted in which year?	
	Up to 200.
Where was the Wright Flyer tested?	

**Q5.** What do you think the word 'championing' means in the final paragraph?

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**Q6.** Why were the Wright brothers classed as celebrities? Give your answer using evidence from the text.

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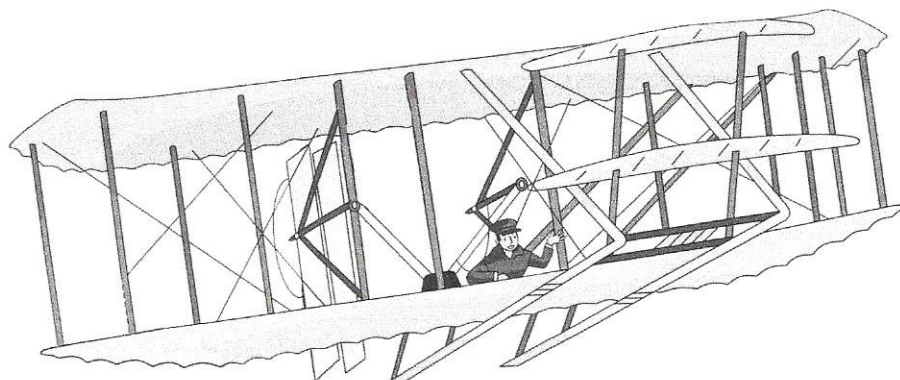
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**Q7.** Which phrase in the text means experimenting and trying things out for themselves? Look in the section about when they were in their 20s.



**Q8.** Using evidence from the text, in your opinion what helped to make the brothers so successful? Find **two** reasons.

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**Q9.** What is the main material used to build aircraft today?

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**Q10.** Why didn't it matter that the plane flew only 260 metres? Use evidence from the text to explain your answer.

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