

MAX INVESTIGATES THE AEROPLANE!

NG Kids' time-travelling mouse, Max, flies back in history to see the rise of the aeroplane...

Woo-hoo!

For centuries, humans have been fascinated by birds and how they fly.

Even as far back as 1487, genius extraordinaire, Leonardo Da Vinci, had a go at designing amazing flying machines.

Leonardo and others studied birds, concentrating on their flapping wings, with little success.

But his ideas were so impractical, Da Vinci was better off turning his drawings into paper aeroplanes!

Leaf!

AAARGH! How do they do it?!

E-E-E-EK!
L-let m-me o-off!

A-all sorts of c-crazy contraptions were b-built during the 18th and 19th centuries...

...including p-planes p-powered b-by b-bicycles or s-steam!

Finally, in 1903, two American bicycle engineers, Wilbur and Orville Wright, built the first flying aeroplane!

Using fixed wings and propellers, their plane, Kitty Hawk, flew for all of 12 seconds! Woo!

Flying had less to do with flapping...

Lift

Fast airflow

Wing shape called aerofoil

Lift exceeds weight to fly

Slow airflow

...and everything to do with weight, speed and controlling the flow of air around the wings.

Before you knew it, all sorts of records were being broken...

- 1909 1st Flight across the Channel.
- 1926 1st Flight to North Pole.
- 1927 1st trans-Atlantic solo flight.

I'm the first mouse to fly across the Channel - backwards!

With the invention of the jet engine in 1939, planes could fly extremely high and fast.

We'll get there the day before we left!

Supersonic jets like Concorde could fly faster than the speed of sound, travelling from London to New York in three hours!

Jetting around the world is now part of our everyday lives.

Mega passenger planes such as the Boeing A380 can carry 853 people!

That works out at over 10,000 mice! Oi, move over!

EEK!
Mice on a plane!

And we're at the threshold of a new dawn, with Virgin Galactic preparing to fly passengers high into the Earth's orbit!

The world really is getting smaller! Cheerio!