

Year 5 Science



You can learn a lot about how aeroplanes fly by looking at paper planes, in fact the Wright Brothers (who invented aeroplanes) tested their ideas using paper models! As with conventional aeroplanes, there are four forces that enable paper planes to stay in the air. These are **thrust** (which you give when you throw the plane into the air), **lift**, **gravity** and **drag**.

How could you manipulate these four forces to design:

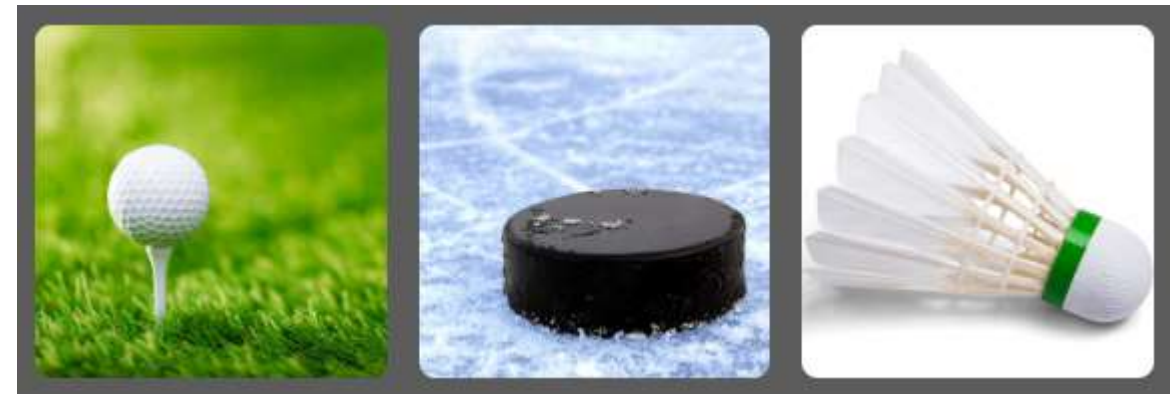
The Ultimate Paper Aeroplane!

Remember, you are scientists, and scientists are never happy with their first attempt.

When we designed our helicopters, we made lots- all with different sized blades- and timed each one multiple times. That gave us clues which helped us make further tweaks to our designs.

I would be very impressed if you could time the flights of your different paper aeroplanes, and produce a graph that shows your progress.

You will have to think carefully about how you set out your investigation, to ensure its fair (try only changing one thing about your aeroplanes).



Bonus question

Which of the above is the odd one out- a golf ball, a hockey puck or a shuttlecock?

Send us your answer and your thinking behind it!

We would love to see your investigation and results; please email it to us at stpetersy6@sthelens.org.uk