

Flying Start Challenge

Glider Competition!



Design your glider for a chance to win a £50 Amazon voucher and more prizes!

Lessons

- Go through the flying start lesson packs, learn about flight dynamics and how to design a glider

Sketch

- Sketch your glider
- Use the flying start logbook to help you with the design

Annotate

- Tell us about your glider's best features
- Explain your design decisions

Submit

- Submit your entry to your teacher
- **Deadline: 31st May**

**See Page 2 for
Details**

Logbooks and Lessons

The official Flying Start Challenge logbook can be found here:

<http://www.flyingstartchallenge.co.uk>

The logbook will guide you through the challenge, including where to access the Flying Start lesson packs and how to get the most out of those lessons to help with your design.

We encourage you to use this logbook and follow the instructions to stand the best chance of doing well in the competition.

Competitions

TWO SEPARATE COMPETITIONS YOU CAN ENTER...

(You can enter either one or both)

Competition 1- Design Only

Once you have gone through the flying start lesson packs, design your own glider, sketch it out on a poster and annotate your poster to tell us about the design.

Types of things you should include on your poster:

- What materials is your glider made from?
- What are the dimensions of your glider?
- How would the glider be put together if it were to be made?
- What are the key design features and how do they help it achieve stable flight?

Prizes will be offered for the:

- **Most artistic**
- **Most innovative**
- **Best engineered design** and
- **Top overall design**, as decided by our judges.

Most artistic category will be judged on the quality of the glider drawing and design of the poster

Most innovative category will be judged on how unique the design is and evidence of having carried out your own research

The best engineered design category will be judged on your use of the knowledge contained in the flying start lessons packs.

Prizes

Competition overall winner

£50 Amazon voucher, 6-month KiwiCo STEM crate subscription and 6-in-1 STEM Solar Robot Kit!
+ £250 STEM voucher for you school



1st place in each category - most artistic, most innovative, and best engineered.
DIY Building Blocks Drone + £200 STEM voucher for you school



2nd place in each category
Air Powered Engine Car



3rd place in each category
DIY Smartphone Projector



4th place in each category
Raspberry Pi Octocam



Submissions

Your poster can be hand drawn or made on a computer and submitted in any of the following formats:

- Word file, PowerPoint file, PDF, Picture (jpg, png etc.)

Deadline:

Any submissions after the **31st May** will not be accepted.

Competition 2 - Build a Glider

- Build a glider using the types of materials and techniques explained in the lesson packs
- Send a picture of your glider to your teacher to send to us

Prizes

1st place

DIY Building Blocks Drone + £200 STEM voucher for you school



2nd place

Air Powered Engine Car



3rd place

DIY Smartphone Projector



4th place

Raspberry Pi Octocam



Entering Both Competitions

- You can enter both competitions
- If you do enter both, it's up to you whether you try and build your design original design on your poster, or make something completely different
- Remember the dead line is **31st May** and any submissions after this date will not be accepted!

Mark Scheme

Poster Competition

Best Engineered		
Knowledge of Flight Dynamics		/10
Manufacturing Methods Described		/5
Environmentally Friendly and Sustainable		/5
Best Artistic Design		
Glider Illustration Quality		/10
Overall Poster Aesthetics		/5
Creativity of Artistic Methods (e.g. paint/colours/collage etc...)		/5
Best Innovative Design		
Novelty of Design (how different from other entries)		/10
New Techniques/Design Features (not mentioned in lessons)		/5
Evidence of Own Research		/5
Total		/60

Build a Glider Competition		
Flight Dynamics (does design suggest thought from theory lessons)		/10
Manufacturing Methods Shown (robust, adaptable etc.)		/10
Glider Aesthetics		/5
Creativity of Materials (inventive use of household items)		/10
Total		/35