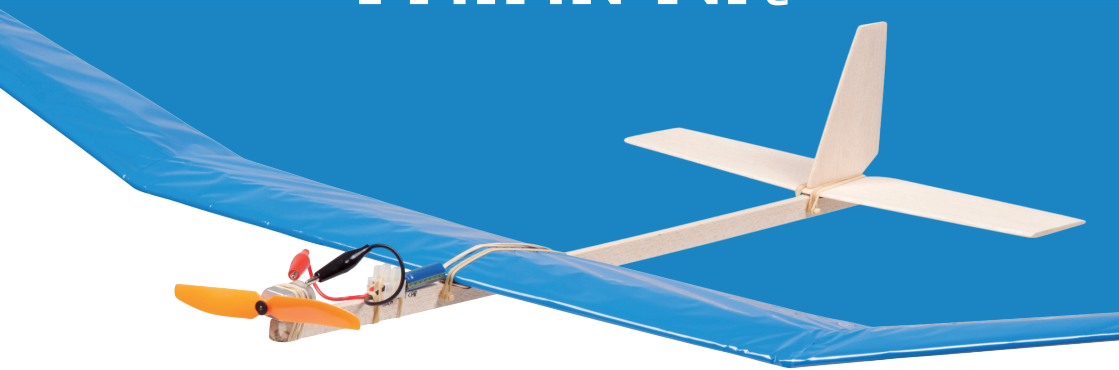


Help bring  
engineering to life

and gain CREST Discovery Awards  
for your students

with our new

# Powered Glider Think Kit



smallpeice   
Dare to imagine

Teams of students are each challenged to design and build an electrically powered glider that travels the furthest over two flights made within 10 minutes of each other. The Smallpeice Trust Powered Glider Think Kit contains all the project materials required, including lesson plans, weekly presentations, student worksheets and a teacher guidance video. Some additional tools will be required to complete the powered gliders.

The project lasts for up to nine weeks and there are enough materials to build five powered gliders for a STEM club of 20 students, split into five teams of four. Students who finish their powered glider and complete their CREST passports are eligible for a CREST Discovery Award, and to receive a personalised certificate.

## The project consists of four main elements:

- 1 Design the glider, all up weight calculations, wing loading and wing area, defining aspect ratio and calculating wing shape, fuselage length and tail configuration
- 2 Construction of wings, fuselage, tail section, power plant, and final assembly
- 3 Trimming for flight, testing, and flying
- 4 The competition

## The topics covered include:

shapes and sizes   measurements   design calculations  
aero-dynamics   weight distribution   trimming for flight



**The CREST Awards scheme** is the British Science Association's flagship programme for young people. CREST is a scheme that inspires young people to think and behave like scientists and engineers. CREST Discovery Awards offer an introduction to real project work and give students the freedom to run their own investigations. Students work in groups to solve a STEM challenge with minimal adult intervention and present their work at the end of the day.

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To find out more about our Think Kits, please visit:

[www.smallpeicetrust.org.uk/think-kits](http://www.smallpeicetrust.org.uk/think-kits)

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