

## KS3 Design and Technology Glider Design for Accessibility – Student Worksheet



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Context: The cockpits of gliders have a number of accessibility limits, as a young and upcoming designer, you have been asked to investigate adaptations which could be made to make gliding available to people with disabilities.



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**Task 1: Watch the video and make notes on anything you see that someone with a disability may struggle with when gliding.**



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**Now you have watched the video, discuss your thoughts in groups**





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Task 2: Choose one thing you are going to adapt and write a brief statement of what you intend to do.

e.g. *I will design an adaptation to the instrument panel controls to make them easier to use for people with limited fine motor control.*

This is called a Design Brief





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Task 3: Spend 5 minutes drawing the part of the glider you are hoping to adapt in the middle of a new page.

Altimeter



Pressure adjustment knob

You set the altimeter to zero before you take off as it will change with the barometric pressure on the day

>>it's round and hard to adjust





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Task 4: Now draw the same part again 4 times, each time changing one aspect each time trying to improve the functionality each time.

Draw your improved designs!!



We hope you enjoyed making gliders more accessible! Want to find out more?

### Go Gliding!

The Go Gliding project is the British Gliding Association's programme of events and schools resources using gliding as a practical gateway to inspiring a love of STEM and aviation. Find out more at <https://gogliding.uk/>

You can find lots of information on flying with and without an engine and the people who fly at:

- womengliding.co.uk - a brilliant community and source of inspiration for female pilots
- gliding.co.uk - the British Gliding Association website
- members.gliding.co.uk/junior-gliding – links to Junior Gliding pages, vids and resources
- airleague.co.uk – information on all forms of aviation

### Aviation is not just about being a pilot!

There's information about the huge range of careers in aviation and aerospace at [stem.caa.co.uk/careers-in-aviation-and-aerospace](http://stem.caa.co.uk/careers-in-aviation-and-aerospace) as well as on the Air League site and at [www.careersinaerospace.com](http://www.careersinaerospace.com) See you on an airfield soon! Find out more about GLIDING at the links below, all types of AVIATION at [airleague.co.uk](http://airleague.co.uk) & CAREERS at [stem.caa.co.uk/careers-in-aviation-and-aerospace](http://stem.caa.co.uk/careers-in-aviation-and-aerospace)