

Flight

Assignment #6 – Flight part one

Complete the following and pass in via Edmodo.



Essential Question: Write your own question – relate it to what you were trying to find out by creating a model glider.

The Problem: In 2-3 sentences, summarize the problem you are solving. You may want to include how models have been and still are used to explore flight (see background information on Distance Glider Challenge handout). Also describe the task you are being challenged to do.

Resources: Review at least two of the following resources to learn more about buoyancy and record which ones you studied as well as your notes of main ideas and supporting details from each resource.

Minute Physics: How do airplanes fly? <https://www.youtube.com/watch?v=Gg0TXNXgz-w>

NASA: Dynamics of Flight <https://www.grc.nasa.gov/www/k-12/UEET/StudentSite/dynamicsofflight.html>

Boldmethod: How Gliders Fly <http://www.boldmethod.com/blog/article/2015/02/your-guide-to-glider-flying/>

Planning and implementing a strategy: Prepare a glider that meets the parameters of the Distance Glider Challenge. Describe in a few sentences your planning and procedure for building it. Photograph your glider from at least two angles and label its parts.

Monitoring progress and revising strategy:

- 1) Describe the testing you carried out on your glider after it was built, and any changes or additions you made to it in order to improve it, and why you thought these would help.
- 2) Explain the how you distributed the weight on your glider to maximize lift and minimize drag and the effects of gravity.
- 3) Watch <http://blogs.howstuffworks.com/brainstuff/learn-something-how-to-fly-a-glider.htm> and compare your model glider with an actual one.

Bring your glider to TASC on March 23rd for the Distance Glider flight challenge! Weather permitting, we will do this outdoors.