

Glide Away

Gliding Aircraft Design Activity

Situation

Efficiency is something that is very important to aerospace engineers. If an aircraft can fly a longer distance using the same power it would be very desirable.

Design and build a glider that will remain airborne for the longest period of time.



Resources

Time	About 3 class periods
People	Groups of two
Energy	Only human energy can be used to launch the glider.
Information	Bernoulli's principle, forces of flight, existing aircraft designs
Money	None
Tools	Scissors, pencils, and a stopwatch.
Materials	Paper, glue, tape, and cardboard to start, but plastic wrap, craft sticks, balsa wood, and Styrofoam trays may enhance creativity.
Space	The device should be no larger than eighteen inches in any direction.

Other Criteria

- The glider must be safe (no dangerously sharp points).
- The glider must display elements of good craftsmanship.
- Attention must be paid to aesthetics in design and construction.

