

# Hot Air Balloon Project

Your object is to design and (hopefully) launch a hot air balloon.

You will be graded on:

- the balloon itself and whether or not it flies (reaching a height of 1 foot automatically passes the flight test)
- research
- a journal of questions and designs your team develops, with costs, daily trials, successes/failures, and errors
- conclusions about the project
- group critiques

This will total 75 points.

Class time will be **limited**, so anticipate out of school scheduling to finish this project. You will be allotted 2 periods in class to work.

Stipulations on the balloon design:

- the balloon itself can not exceed 1 meter in diameter
- the only gas that may be used is the air itself (no helium or other forged gases)

Group (There should be three team members, randomly chosen.)

Assign each member a task:

1. Recorder - Keep a journal of every detail throughout this project on a daily basis. It is your goal to ensure that the journal meets the specifications of a research team log. (i.e., what date did the team get together, what did they accomplish, did the first balloon flight work and why or why not, etc.)
2. Materials/Task Master - Pick up materials and determine how to assemble the balloon. Keep track of all costs and receipts. Help the Recorder assemble the journal.
3. Researcher - This person should have access to an Internet. Research the answers to the questions from the group. Keep a list of web sites, bibliographies, and what sources were helpful. Topics you may have to research might include: air density, balloon functions, balloon designs, materials, etc.