



# Make and Fly a Hot Air Balloon Challenge

## Mt Harding Race Course Methven 2pm 21 April

French brothers, Joseph-Michel and Jacques-Etienne Montgolfier are acknowledged as being the first persons in the world to construct, inflate and send a balloon up in flight. On the 16th September 1783, a duck, sheep and rooster were placed in a cage and given a safe flight, except that on landing, the sheep panicked and stood on the duck's wing - breaking it. They then believed that the mysteries of the sky could be conquered by man and so negotiations with the King of France allowed a Montgolfier balloon to be flown by the first men over the city of Paris on 21st November 1783. The King wanted a convicted criminal to go aboard and if he met his fate he would have had his just reward, but if he survived he would receive the Royal pardon. However, the Montgolfier brothers insisted that it was important to have men aboard who knew a little more than a convicted criminal and requested that two of their friends, Pilatre de Rozier and Francois Laurent, the Marquis d'Arlandes, fly the very first Montgolfier balloon over the City of Paris on 21st November 1783.

**Task:** Students in groups of 3 – 4 are to make their own hot air balloon that will rise about 3 metres and stay aloft as long as possible.

### Rules:

1. All materials will be provided by the organizers.
2. Teams may research and practice at school or at home but construction of their entry must be made at the venue on the day of competition.
3. Balloon must not exceed 100cms in height.
4. Teams may bring a plan or notes to help them complete the challenge.
5. Teams are allowed only one attempt to fly their balloon.
6. You will have a total of 30 minutes to complete the challenge.
7. Schools may enter up to three teams in each category. (Contact the organizer if you want to enter more)
8. Categories: Junior – years 5-6, Intermediate – years 7-8, Senior – years 9 – 10

### Materials:

1. 20 sheets of tissue paper, 50cms x 75cms
2. paste
3. electric hand-held hairdryer
4. scissors

### The Task will be judged on:

1. Height gained
2. Time aloft

Prizes will also be given for: the smoothest landing, and the most spectacular landing.

**Useful resources:** there are numerous sites on the web, and books in the libraries

[www.ballooningaz.com](http://www.ballooningaz.com)  
[www.deepscience.com/experiment/hotairballoons.html](http://www.deepscience.com/experiment/hotairballoons.html)  
[www.nzballooning.com](http://www.nzballooning.com)  
[www.teachingonline.org](http://www.teachingonline.org)  
[www.aimsedu.org](http://www.aimsedu.org)  
[www.balloonfest.com](http://www.balloonfest.com)  
[www.educ.drake.edu](http://www.educ.drake.edu)  
[www.geocities.com](http://www.geocities.com)  
[www.hotairballoons.com](http://www.hotairballoons.com)  
[www.exploratorium.org](http://www.exploratorium.org)  
[www.overflite.com](http://www.overflite.com)

### Send entries to:

#### Hot Air Balloon Competition

c/- S Dickson  
45 Spaxton Street  
Methven

or email [dicksons@mthutt.school.nz](mailto:dicksons@mthutt.school.nz)

#### Closing date: Monday 16 April 07

State: School:

Year level:

Team name and names of team members:

Entries will be accepted on the day if spaces are available.