

## How to make your hot air balloon

### Background:

The first hot air balloon that carried people was built by Etienne and Joseph Montgolfier and flown in 1783 in France. This successful flight captured the imagination of people around the world and sparked the drive to build a controllable flying machine. It would take another 120 years before the first airplane was successfully flown. You can see the oldest balloon basket, and thus oldest aircraft, in the United States at the New England Air Museum.

### Materials:

- ✦ A light weight garbage bag (Clear or white ones are light weight. Black garbage bags may be too heavy.)
- ✦ Hair dryer

### Instructions

1. Pull apart the opening of the garbage bag.



2. Gather about 6 inches from one side of the opening and tie it into a knot to make a handle.



3. Gather about 6 inches from the other side of the opening and tie it into a knot.



4. Have two friends hold the handles.



5. With an adult's assistance, place the nozzle of the hair dryer into the opening of the garbage bag (balloon). Make sure that the air intake for the hair dryer is outside the bag.



6. Blow heat into the bag (balloon). The bag (balloon) will inflate and heat up.



7. After 10-15 seconds of heating up the bag (balloon), have your friends let go, and watch your balloon rise! (This experiment works best when the air temperature outside the balloon is cold!)

