

Model Hot Air Balloon Building

Instructions prepared by Clayton G. New Zealand.

clayton@isnotcrazy.com

Please Note: Build and fly these balloons at your own risk!

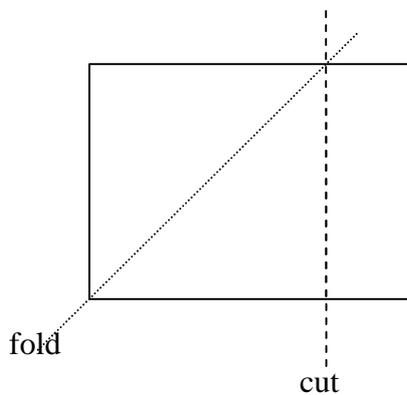
Material:

5 large sheets of tissue paper
length of wire – about 100cm
Meths or similar fuel

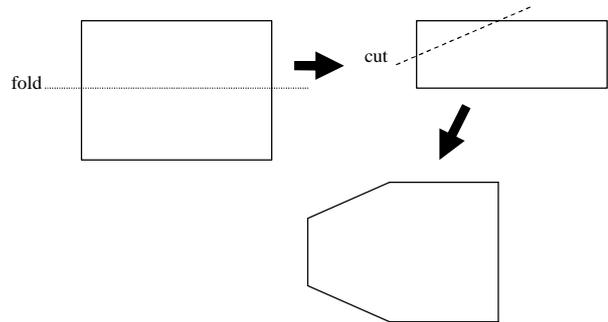
glue stick or paste
piece of cotton wool

Construction:

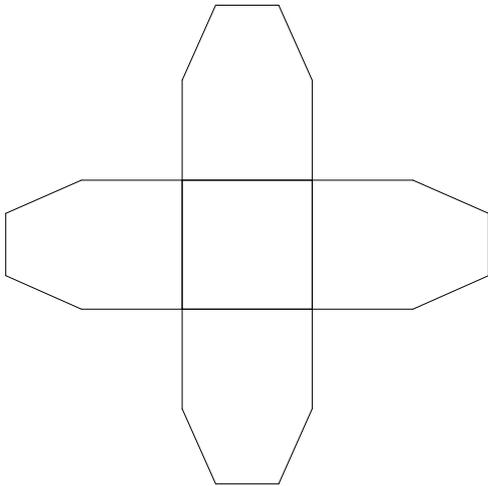
1. Cut the top by trimming one sheet of paper to make a square (fold it diagonally and trim off the excess).



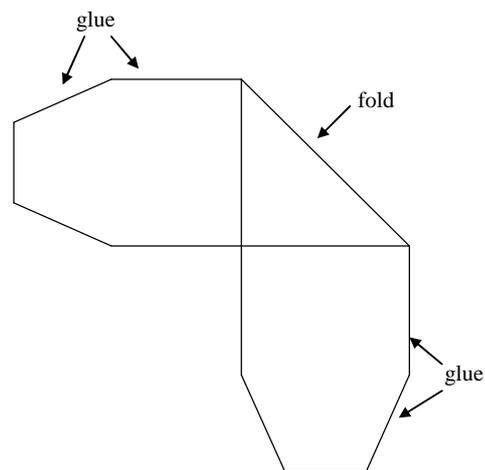
2. Cut the sides – fold the four sides in half lengthwise and cut off a large corner to make the sides.



3. Glue the sides to the top, making a cross.

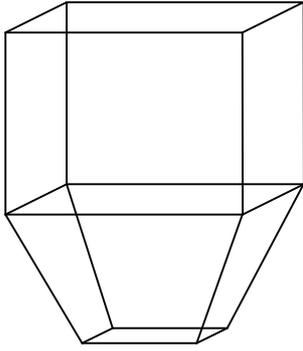


4. Fold the top diagonally. Glue together the outside edges.

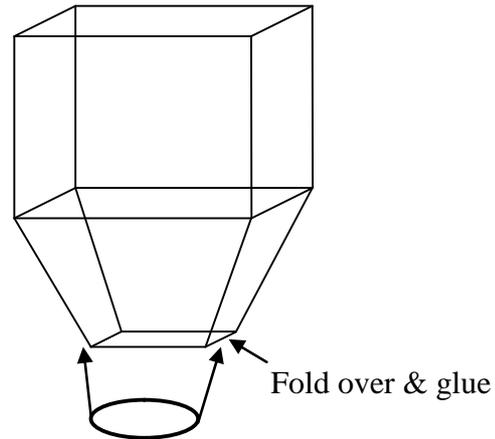


At this point the balloon can be decorated using felt pens.

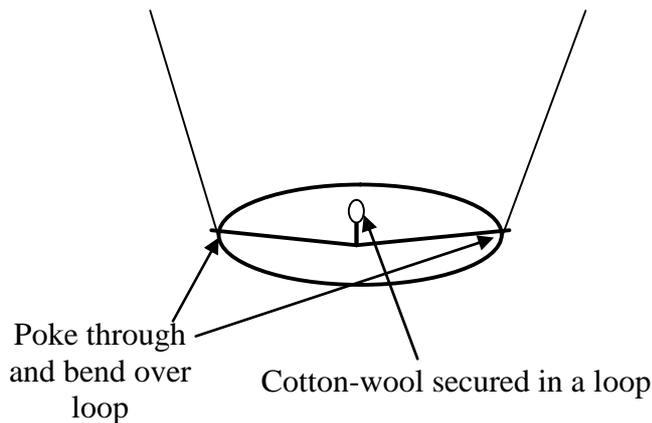
5. Open out and glue the remaining sides to make a tissue paper bag.



6. Make a wire loop the size of the bag opening. Fold the tissue over the loop and glue it in place. Use clothes pegs to hold the loop while it is being glued.



7. Make the wire cross-piece. Put a loop in the middle of it to holding some cotton wool up inside the balloon. Push the ends through the tissue paper and bend it around the loop to hold it in place. With the cotton wool up inside the balloon, it reduces the risk of the flame being blown and igniting the paper.



To Fly:

On a windless day:

1. Choose a suitable launch site – clear of obstacles, and somewhere where it will not matter if you have to drop a burning balloon!
2. Soak the cotton wool in meths.
3. With bag held open and vertical, light the fuel. Watch carefully, and be prepared to drop the balloon if it catches fire.
4. When the balloon has plenty of lift, release it.

Notes:

Do not fly during times of high fire risk. Usually the balloon will not land until the flame is out, but this is not guaranteed! Do not fly near airports or into controlled airspace.

The balloon can be preheated, or just given a small flight, using the heat from a hair dryer or hot air gun.

Solid fire starters can be used as an alternate fuel. Skewer them onto the wire (heating the wire first helps here).

Larger balloons can easily be built using this method. First build up larger tissue sheets by gluing sheets together. Then follow the instructions above using these larger sheets.

KEEP SAFE & HAVE FUN!!