

Paper Takes Flight - Making Tissue Paper Balloons

The balloon is made of seven "gores" of tissue paper. Two and one half sheets of tissue paper will make one gore. Each gore can be unique using different colors of tissue paper, or make gores all one color. Use your imagination! Gores can be decorated with scraps of tissue, but be careful not to add too much weight or the balloon will not fly well.

Gores will be glued together, leaving openings at the top and bottom. A string will be attached to the top, and dry wall tape attached at the bottom to create the throat, allowing for inflation.

Instructions:

1. Glue short ends of 2 ½ sheets together to make one large rectangle approximately 75" long and 20" wide. Repeat 6 more times, making a total of 7 rectangles. Some will be left over, so save the pieces for repairs.
2. Using the pattern provided cut out 7 gores from the rectangles built in step 1. It is possible to stack all seven rectangles and cut all at one time.
3. Select two gores. Lay one on top of the other, allowing a ½" margin to show on the bottom gore (figure 1).
4. Apply a line of glue to the ½" margin of the bottom gore #1 (figure 2). Fold this ½" over the edge of panel #2 as you go along (figure 3). Apply the glue stick heavily and press firmly together.
5. Place gore #3 on top of gore #2, allowing a ½" margin to show on gore #2 on the unglued side. Repeat gluing as in previous step.
6. Glue up the remaining 4 gores using the above method (accordion fashion). Join free edges of gore #1 and gore #7, joining all gores (figure 4). This will make a circle when opened.
7. During and after gluing, carefully separate all folds to keep them from sticking together. This is important!
8. Tie off the top of the balloon with string, about 1" back from the top to close hole in top of balloon. Leave a loop in string for holding balloon up while inflating (figure 5).
9. Glue the pieces of drywall tape on top of each other. Form into a circle approximately 12" in diameter.
10. Open hole in bottom of balloon and shape balloon panels to fit by making tucks and gluing together. Place ring inside opening and fold paper over it about 1", gluing into place (figure 6). RING MUST BE A MINIMUM OF 12" FOR PROPER INFLATION!
11. Let balloon dry thoroughly. You can inflate with a fan or hair dryer to check for holes, loose edges, etc. Make necessary repairs with glue and paper or tape. A fan or hair dryer is not sufficient to launch the balloon. For heating tips visit our website at www.explorium.org.

YOUR BALLOON IS NOW READY FOR LAUNCHING!

WARNING!

Please be careful and do not launch in the proximity to power lines.

