Small tetrahedral solar hot air balloon

- 1. Remove 4 trash bags from the roll.
- 2. Cut off the sealed end (as close to the seal as possible).
- 3. Find the long edge of the folded bag that is folded several times over.
- 4. Insert the blade of a pair of scissors into one of the folds and cut all the way to the other end. You should be able to spread the bag open into a 3ft x 5ft sheet of plastic.
- 5. Repeat this procedure for all 4 bags.
- 6. Join 2 bags together with masking tape, along the long (5ft) side of the sheets.
- 7. You should have a 5x6ft sheet of plastic. Attach another bag to one of the 5ft sides, and then the last bag. You should have a long, 12x5ft sheet of plastic.
- 8. Join the two shorter (5ft) ends with the masking tape.
- 9. You will now have a flat tube that measures 6ft x 5ft.
- 10. Seal one of the open ends with masking tape. This is Seam A. There should be a seam at the center of the new seam.
- 11. At the other end of this seam, take the remaining open end and pull it open.
- 12. Seal this opening, so the seam is perpendicular to seam A. <u>See how to make seam</u> There should be 3 corners of the balloon.
- 13. Cut about 5 inches off of one of the corners, and invert the entire balloon like a sock.
- 14. When the balloon is inflated, it should be triangualr, with 3 sides. This shape is a tetrahedron, similar to a pyramid.
- 15. Use a blow dryer to inflate. The sun will keep the balloon hot and can be flown on any sunny, calm day. A small fan will work, but since this is a small balloon it is hard, especially in wind, to heat up very fast.