Let's Go Fly a Kite!

Materials:

Template, large plastic bag, (approximately 66 cm x 80 cm), marker, ruler, scissors, 6 plastic straws or 2 thin skewers (approx. 45 cm in length), tape, hole punch, kite string: cotton, nylon, or silk (approx. 4-6 m in length: 2 m for bridle, 2-4 m for line or tether)

To make the kite:

- 1. Take a large plastic bag and lay it on the floor or table. Use the seam in the plastic bag as the "fold" line corresponding to the template.
- 2. Using the template as a guide, draw the kite onto the plastic bag with the marker.
- 3. Using scissors, cut out the kite along the marker lines. Adult supervision is recommended.
- 4. Unfold the plastic bag.
- 5. You will need straws that run the length of the kite, approx. 45 cm. You will need to attach three straws together. Insert



one straw into another and secure with tape. Once connected, use scissors to trim the new straw so that it is the correct length. Repeat this step as you will need two straw lengths. Secure these to the plastic bag using small pieces of tape. Refer to template.

6. String will need to be attached to the kite across the widest part of the kite. This is known as the bridle. The bridle should



be three times the width of the kite. For this kite, cut a string 180 cm long. Make holes (see template) so that the bridle can be attached to the ends of the kite. To avoid tearing the bag, the ends of the bag should be reinforced with tape before using the hole punch.

- 7. Attach each end of the bridle through the holes on the kite using a simple knot.
- 8. Fold the bridle in half to find the halfway point. Connect a longer piece of string at the halfway point. This is the kite line.
- 9. Prepare tails. Using the remaining plastic bag, cut strips



of the plastic bag. Attach strips together so that you have varying lengths. Suggested lengths are 10 cm, 50 cm, 100 cm. This will allow kids to test the stability of their kites using different tail lengths.

Testing your kite:

Take your kite outside to an open area. Try walking with your kite. Try running with it. What do you notice happens when you move at different speeds? If it's a windy day, can you make your kite fly without moving? Tape one of the short (10 cm) plastic tails to the bottom of your kite to make a tail. Try flying your kite. How does your kite move differently? Does it matter where you attach the tail on your kite? Switch the short tail with a longer one and test. What do you notice compared to no tail/short tail? What happens if you add more than one tail to your kite? Try the different lengths and combinations.

Want to try more?

Use different materials to build your sled kite (plastic bags, different paper, what else can you find that might work?) Which materials help the kite fly higher? Does the weight of the kite matter?

Want to know more about Air and Fliaht?





Scientists in School is a Canadian registered charity, registration number: 867139537RR0001 www.scientistsinschool.ca

