

## Air & Aerodynamics – Go Fly a (Bag) Kite

Winter keeps some of us indoors but we finally get to appreciate going outside in the Spring air even if it is windy. And we can have fun in the wind as Spring is kite season. The bag kite is the simplest kite to make and enjoy.



### Materials:

- Paper lunch bag
- Coloured streamers
- Long string, yarn or fishing line.
- Crayons or markers
- Tape
- Scissors

**Procedure:** (Remember to have your parent's permission and have them watch and help you.)

- Cut off the bottom of the lunch bag.
- Decorate the bag.
- Tape 3 coloured streamers along one edge of one side of one of the open ends of the bag.
- Turn the bag around and on the opposite open end of the bag in the middle of the edge, attach the string using good strong tape.
- Take your kite out into the breeze and if there's no breeze ... run like the wind!

### What's Happening:

Air passing over the top of the kite travels farther and faster than the air travelling under it causing lower air pressure on the top compared to the bottom. This difference in air pressure pushes the kite up. It's the same reason planes have curved tops to their wings which allows them to fly in the air. In science we call this the Bernoulli Effect. For more on the science of kite flight see: <http://www.my-best-kite.com/how-to-make-a-kite.html>.

### Extension:

You can experiment and design your own paper bag kites. How big can the bag be? What happens if you punch holes in the bag? How important are the streamer tails? How high will it fly? What kind of string works best? See what else you can make fly like a kite. (Try making a paper plate kite.) The internet has many sites devoted to kite building. Here's one such site that contains the instructions for 27 different kites: <http://www.my-best-kite.com/how-to-make-a-kite.html>. Try making different ones and see which is your favourite.

This activity is based on our Air & Aerodynamics kits. The source for this lab was: [http://www.lawrencehallofscience.org/science\\_out\\_of\\_school/science\\_in\\_your\\_community/community\\_events/whitehouse\\_easter/make\\_a\\_paper\\_kite](http://www.lawrencehallofscience.org/science_out_of_school/science_in_your_community/community_events/whitehouse_easter/make_a_paper_kite). Our teaching kits (described on our website) are loaned out FREE to provide classroom teachers and parents of home schooled children an opportunity to explore Science in interesting ways. Please consider volunteering as a classroom guest speaker or allow your business as a field trip location.



Praxis hosted Operation Thoth, a conference for grade nine boys, on April 19<sup>th</sup>. A huge thank you is extended to Medicine Hat College, City of Medicine Hat - Electrical Generation, Meggitt International, Cancarb and Medicine Hat News. For more information and pictures see: <http://praxismedhat.com/services-operation-thoth/>.

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