

## Hallowe'en – Morticia's Bouquet & Bleeding Pumpkin

Since Hallowe'en (Canadian spelling) is near we'll explore a couple of activities that have a science basis to them.



### Materials:

- Morticia's Bouquet:
  - White carnations
  - Black Rit dye
  - Glass jar
  - Knife
  - Water
- Bleeding Pumpkin:
  - Goldenrod
  - Construction Paper
  - Liquid ammonia cleaner
  - Cotton Swabs
  - Scissors
  - Glass or cup

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

- Morticia's Bouquet:
  - Mix up the water and black dye in the glass jar.
  - Cut the ends of the white carnations and place immediately in the jar. Watch what happens.
  - Note what happens in 4 hours. Leave it overnight and observe it the next morning.
- Bleeding Pumpkin
  - Cut the yellow construction paper into the shape of a jack-o-lantern.
  - Add 2 tablespoons of ammonia liquid cleaner to a glass of water.
  - Dip the cotton swab into the ammonia water and rub it on the jack-o-lantern. Observe.
  - Wipe some ammonia water on your hand and press it onto another sheet of yellow construction paper. Wash your hands afterwards. (Ammonia water is like strong soap – good to clean with but don't leave it on our skin too long or get it in your eyes or mouth).

### What's Happening:

**Morticia's Bouquet:** Plants transport water up their stems into the petals and leaves. In this case the water brings the black dye turning the white petals gray then quite dark and perhaps even black. A suitable Hallowe'en gift for your teacher or principal perhaps?

**Bleeding Pumpkin:** After the yellow paper turns red, let it dry. What happens? Try it again. Does it work a second time? Ammonia is a strong base and it turns the yellow dye in the paper red. The yellow dye acts as an indicator (something that changes colour in the presence of an acid or base).

### Extension:

Try different coloured dye for different coloured flowers. See if you can make a black and orange bouquet. You can write secret messages with a candle on the yellow paper that will be revealed when you swab it with the ammonia water, disappearing when it dries. These activities are based on our Hallowe'en Seasonal kit. The sources were:

[http://www.ehow.com/way\\_5454782\\_kids-halloween-science-experiments.html](http://www.ehow.com/way_5454782_kids-halloween-science-experiments.html) and <http://voices.yahoo.com/easy-halloween-science-experiments-classroom-4225065.html?cat=4>.

Praxis wishes to thank all the people who attend our Family Science Olympics last Saturday. This registered community event was our 20<sup>th</sup> Olympics in support of Science education. For more information and pictures of this event, please see our website: <http://www.praxismh.ca/s&tweek.html>

Lorne Cooper, Regional Executive Director

PRAXIS, "Making Science Fun". Contact Praxis at [praxis@praxismh.ca](mailto:praxis@praxismh.ca), [www.praxismh.ca](http://www.praxismh.ca), Tweet or follow us @PraxisMedHat, or friend us on Facebook. Address: c/o 200 7th Street S.W., Medicine Hat, AB, T1A 4K1 Phone: 403-527-5365, Fax: 403-527-6570.