



I.P.A KIDS ACTIVITY

Static Powered Dancing Ghost



Today we were playing around with some balloons (which we often do when things get slow) and we had an idea to add a Halloween twist to a familiar static experiment. It is really quite a lot of fun and super simple.

For this bit of spooky science you will need:

- A piece of tissue paper
- A balloon
- Scissors
- A head of hair
- Spooky Music (optional)

1. First cut out a ghost shape in the tissue as shown about 1.5 inches (4 cm) long and add some eyes with a marker. If you are using 2-ply tissues, peel apart the 2 layers to get the tissue as thin as possible. Cut out a few ghosts for more fun and place them on a flat surface. You might want to make some out of regular paper to compare. (Some readers found slightly heavier ghosts easier to control.)
2. Blow up the balloon and tie it. Then rub it really fast through your hair for about 10 seconds. This will add a static charge.
3. Slowly bring the balloon near the ghost, and the ghost will begin to rise toward the balloon. (Our ghost "arms" actually reached toward the balloon as we got it near.) If the balloon is charged enough, the ghost will rise and float right up to the balloon, even when it is several inches away. With a little practice, you can get the ghost to rise, float, and even dance around.

TIP: The easiest way to make the ghost rise without it sticking to the balloon is to tape the very tip of the bottom of the ghost to a table. The ghost will rise and move along with the balloon. With a good charge, the balloon can control the ghost from several inches away.

How's it work?

When you rub the balloon through your hair, invisible electrons (with a negative charge) build up on the surface of the balloon. The electrons have the power to pull very light objects (with a positive charge) toward them – in this case, the tissue ghost!

