**ONE PAGE HANDOUT:   
Low or no-cost physical science activities and demos**

1. Air resistance paper drop: 2-3 sheet(s) of copy paper; textbook with rubber band. Predict Observe Explain (POE) why and when this is so  
   - Video with example dialog: http://physicsed.buffalostate.edu/pubs/PHY690/Sannes2004AirRes/Videos/8Mar05/testpage1.html

- And a masters’ student paper if you want more details: http://physicsed.buffalostate.edu/pubs/PHY690/Sannes2004AirRes/Sannes690Version11.doc

1. Low cost “sticky tape” electrostatics (see Morse text chapter):  
   - making and testing + / - charges with sticky tape (law of charge, conservation of charge and polarization)  
   - soda pop can + Christmas tinsel electroscopes (charging by contact and induction)  
   - paper wrapped restaurant straw with wrapper bits  
   - styrofoam plate on wall / bending streams of water etc

See CPU activities on website for worksheets.

1. Coin drop /sideways toss: 2 pennies and a tongue depressor or popsicle stick (projectile motion and vertical drop comparison of times by ear – should be independent of sideways motion.

This page with click-able links and extended handouts, worksheets and instructions: PhysicsEd.BuffaloState.Edu/pubs/BPS/

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