

ExploratoRio: Notes to the Future: Vortex

I. Vortex Exhibit

a. Suppliers

- i. Emigh Hardware – PVC pipe or washers**
- ii. Grocery store (any really) – soda bottles**

b. Unexpected difficulties

- i. Washers did not work well in the large two-liter soda bottles because the two bottles would just break apart, so try to use the PVC pipe in the larger ones**
- ii. Little kids are not gentle with the bottles and are capable of breaking them**

c. Suggestions for improvement

- i. Try different sizes of bottles**
- ii. Create a theme (twister – cows in tornado)**
- iii. Use different materials in bottle (try using oil and water)**

d. tips for dealing with:

- i. little kids – be patient, get them excited about what's happening, and make some smaller bottles for the really small ones who cannot handle the large 2-liter vortex bottles**
- ii. parents – they are more interested in what is actually happening, so know the physics behind what is going on, and most parents will be hesitant to try it out, so get them to actually make a vortex**

e. previous advice from notes to the future

- i. (did not receive previous N2tF)**

f. a little more advice

- i. It takes time to make a good exhibit**
- ii. Having a partner can really help!**
- iii. Have fun with it and be creative!**