



California State University of Bakersfield, Department of Chemistry

Picking Up or Making A Mess?



Standards:

MS-PS1.A Gases and liquids are made of molecules or inert atoms that are moving about relative to each other

5-PS1.A Matter of any type can be subdivided into particles that are too small to see, but even then the matter still exists and can be detected by other means. A model showing that gases are made from matter particles that are too small to see and are moving freely around in space can explain many observations, including the inflation and shape of a balloon and the effects of air on larger particles or objects.

Introduction:

Bernoulli's Principle says that as the speed of a fluid (AIR) increases, pressure decreases, and as speed decreases, pressure increases. As you twirl the tubing (dryer tube) over your head, the speed of the air at the top of the tube increases (lowering the pressure), pulling high pressure air (and bits of paper or peanuts) up the tube! We are going to use Bernoulli's Principle to scatter bits of paper or foam peanuts all over the room!

Materials:

- 1.5 m dryer vent tubing (or other corrugated tubing)
- torn bits of paper or styrofoam packing peanuts in a box or bucket

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