

THE BALLOON ROCKET

Concepts Illustrated:

(1) Newton's 3rd law and Thrust

Time Requirements: 5 minutes

Grade Level of Audience: This qualitative demonstration is suitable (and enjoyed) by students at all age levels.

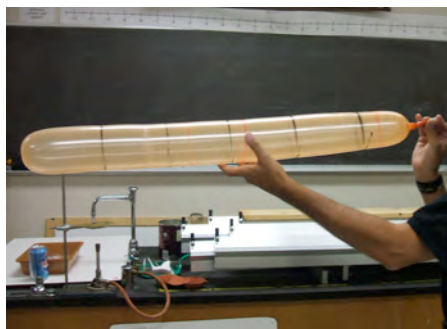
I. Materials and Equipment Utilized

1. Long flying balloons (may be obtained at any party store/party outlet). I was able to get 12 balloons with nozzles for about \$3.50



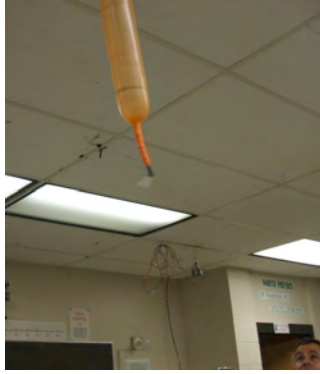
II. Description of Set-up and/or Construction of Apparatus

1. Inflate balloon and pinch off air. Attach balloon to nozzle.



III. Details of Student Implementation

1. Release the balloon with nozzle pointed downward. The balloon will pretty much shoot straight up, once again, demonstrating Newton's 3rd Law and the concept of thrust.



2. This is a good demonstration to do outside or inside in a room with tall ceilings. The first time I did this indoors, my balloon quickly hit the ceiling and popped. Be careful not to air the balloon at anyone.