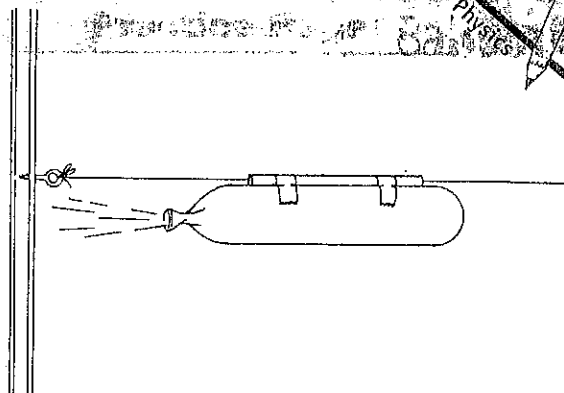


Balloon Racers

- Procedure:**
1. Attach a string track across the room by inserting eye hooks into the walls or using pushpins to secure the string to the wall.
 2. Thread the string through the straw so that the straw moves freely on it.
 3. Run the string across the room from eye hook to eye hook (or pushpin to pushpin) at approximately waist level.
 4. Blow up the balloon but do not tie the end. Hold it closed.
 5. Have a partner attach the straw to it lengthwise with masking tape while you hold the balloon closed so the air does not escape.
 6. Hold the open end of the balloon against the wall.
 7. Using colored chalk, mark the string to show where the front end of the balloon is.
 8. Have one of the members of your group say "3, 2, 1, Go" and start the stopwatch while you let the balloon go. The balloon will race across the string. When it stops moving, stop the timer.
 9. Mark the string where the balloon stopped with colored chalk.
 10. Record the amount of time it took the balloon to come to a complete stop.
 11. Measure the distance the balloon traveled on the string.
 12. Determine the speed it traveled by dividing the distance by the time.
 13. Repeat the activity several times to complete the chart.



Trial Number	Distance Traveled (meters)	Time Lapse (seconds)	Speed (meters/second)
1			
2			
3			
4			
5			
6			
7			

Questions: Answer the questions on the back of the paper.

1. Describe what happened when you let go of the balloon.
2. Did the balloon travel faster or slower towards the end? Why?
3. To determine the speed, the distance traveled is divided by the time it took. In this activity, your speed is measured in centimeters/second. What are some other units that describe the speed of an object?
4. Draw a picture of the balloon racer on the string. Draw arrows to show where you think the balloon racer went faster (accelerated) and slower (decelerated).