



# **IBP Balloon Car Challenge!**



It's Simple... Who can make an air powered car that can drive the furthest?  
***Ian Baillie has a challenge for you!***

## **MATERIALS**

Every package will contain:

- 1 Empty water bottle
- 4 plastic tops
- 3 Popsicle sticks
- 2 straws
- 1 pipe cleaner
- 1 Balloon

Plus... you can use/add any fasteners you like (tape, glue, nails, or screws)



***Hint: Friction is a force that acts in an opposite direction to***

## **BRAINSTORM**

You will have to launch it from the gym floor. Your balloon car will use jet power to move! The stored air in the balloon pushes out creating thrust – the force that pushes the car forward. When the air from the balloon moves in one direction, it pushes the car in the other direction.

## **BUILD**

*Work with a partner and ask adults to help!*  
*Hint: It doesn't need to be a car, how about a sailboat, bike, or tricycle.*

*Design Question: What happens if you blow your balloon up too much, or it pops during the assembly, will you be able to fix it quickly?*

## **TEST/COMPETE**

Does your vehicle drive along the ground? Bring it to school for the January End of Month Assembly on ***January 29th at 10:30 am***

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**PLEASE SEND HOME ONE KIT FOR...**

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**CHILD**

***to assemble, invent & engineer***

**PARTNER**

**PARTNER**

\_\_\_\_\_ **Parent/Guardian.**

**Date:** \_\_\_\_\_