

BALLOON RACES



SUPERNOVA
DALHOUSIE UNIVERSITY | HALIFAX, NOVA SCOTIA

GRAB A PARTNER AND TEST OUT NEWTON'S 3RD LAW!

MATERIALS

4

Approximately 2 m piece of string
2 balloons
1 straw, cut in half
Tape

30 MINS

PROCEDURE

Step 1

Blow up a balloon, but do not tie the end. Make a hypothesis (an educated guess) of what will happen when you let go.

Step 2

Test your hypothesis! Let go of the balloon and see what happens.

Step 3

Set up your race track: Tie one end of the string to a chair or doorknob. Thread the free end through the straw, and tie it to another chair, making sure that the string is pulled tight and runs parallel to the ground. Repeat with the second string.

Step 4

With a partner, blow up two balloons and pinch them off at the mouth (where you blow into), but do not tie. Be sure to blow them up to the same size.

Step 5

Tape the straws to the top of the balloons so that the mouth of the balloon is in line with the string. Slide the mouths of the balloons to your starting line, and let go!

YOUR BALLOONS ARE OFF TO THE RACES!

PURPOSE & SCIENCE OUTCOMES

- An un-inflated balloon resting on a table is in a state of equilibrium – it's not moving because the forces acting upon it are balanced.
- If you start inflating it, the work you are doing changes the shape of the balloon and gives it potential energy.

ANY QUESTIONS? REACH OUT @SUPERNOVAATDAL