JR ENGINEERS
BALLOON CAR

Get kids thinking about how things go by setting up this super simple balloon car physics activity that is more like play!

SUPPLIES

Balloon
Lollipop sticks
Toilet paper tube
Hole puncher
Hot glue gun
Tape
Straws
Scissors
4 Bottle tops

INSTRUCTIONS

STEP 1: Cut off two lollipop sticks.

STEP 2: Hot glue the sticks to two bottle tops.

STEP 3: Use the hole puncher to punch four holes in the toilet paper tube to attach the wheels.

STEP 4: Stick the lollipop sticks through the holes, and then glue on the remaining two tops/wheels.

STEP 5: Punch another hole in the top of the tube near the front of the car.

STEP 6: Stick a straw through the hole and tape a balloon to the end.

STEP 7: Now blow through the straw to inflate the balloon, set down the car while holding the straw closed, then let go and watch the fun!

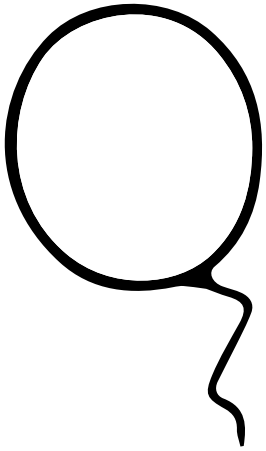
THE SCIENCE

To start, the user inflates the balloon with air. The balloon acts as a temporary energy storage device, storing potential energy in the form of the compressed air inside.

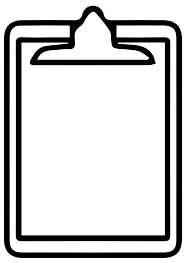
When the user releases the air, the compressed air inside the balloon starts to escape rapidly through the opening. This escaping air creates an outward flow in one direction according to Newton's third law. For every action of air escaping, there is an equal and opposite reaction, which propels the car forward, making the car go!.

Balloon Car Observations

Use this worksheet to process and evaluate your work.



Did your balloon car work? Did it need any adjustments?



RECORD

Test and measure how far your car will go!

TRIAL 1	DISTANCE IN INCHES
TRIAL 2	DISTANCE IN INCHES
TRIAL 3	DISTANCE IN INCHES

If your car didn't work, what can you try next time?

Test out different shaped balloons, change the angle of the straw, play around with the wheels!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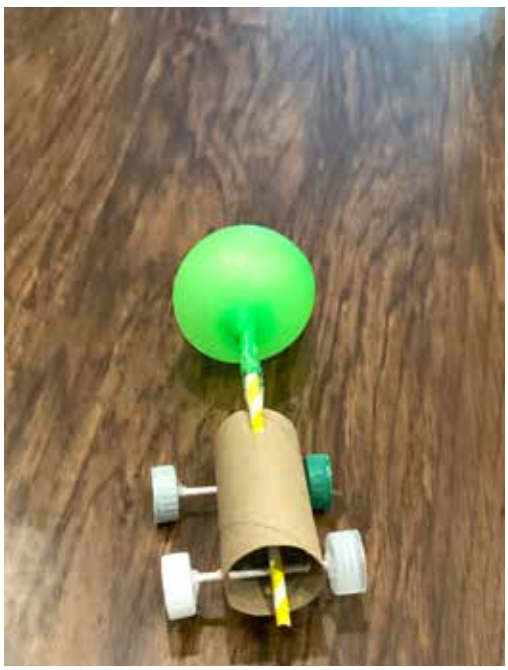
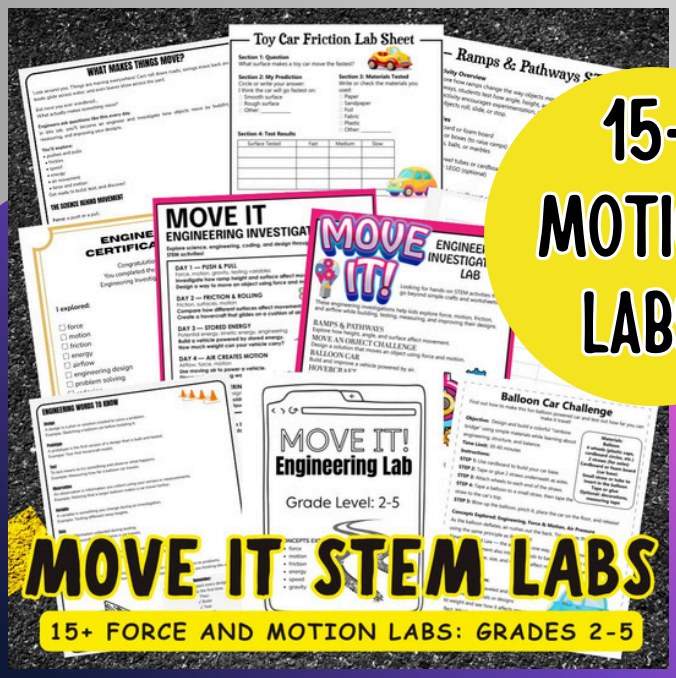


NEXT STEPS

LITTLE BINS FOR LITTLE HANDS

IF YOU LIKED THIS ACTIVITY, TRY THESE PROJECTS:

- ENGINEERING ACTIVITIES
- OUTDOOR STEM LABS
- FORCE AND MOTION WORKSHEETS, K-2



15+ MOTION LABS!

TURN THIS INTO A FORCE AND MOTION UNIT!

MOVE IT STEM LABS

EVERY PACK EVERY PRINTABLE

Get the ALL ACCESS PASS!

Little Bins for Little Hands helps make hands-on learning easy for families and educators by providing simple, engaging science experiments, STEM activities, art projects, and printable resources that encourage curiosity, creativity, and learning through play.