

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!

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.

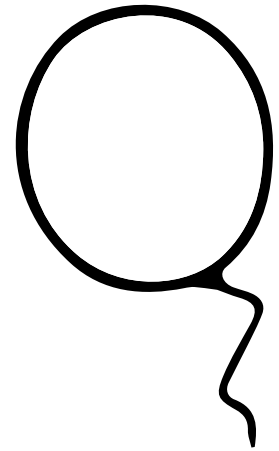
When the user releases the air, the compressed air inside the balloon starts to escape rapidly through the opening. This escaping air creates an outward flow in one direction according to Newton's third law. For every action of air escaping, there is an equal and opposite reaction, which propels the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

SUPPLIES

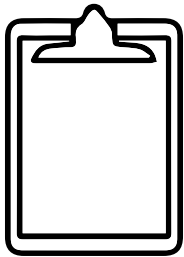
Balloon
Lollipop sticks
Toilet paper tube
Hole puncher
Hot glue gun
Tape
Straws
Scissors
4 Bottle tops

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!





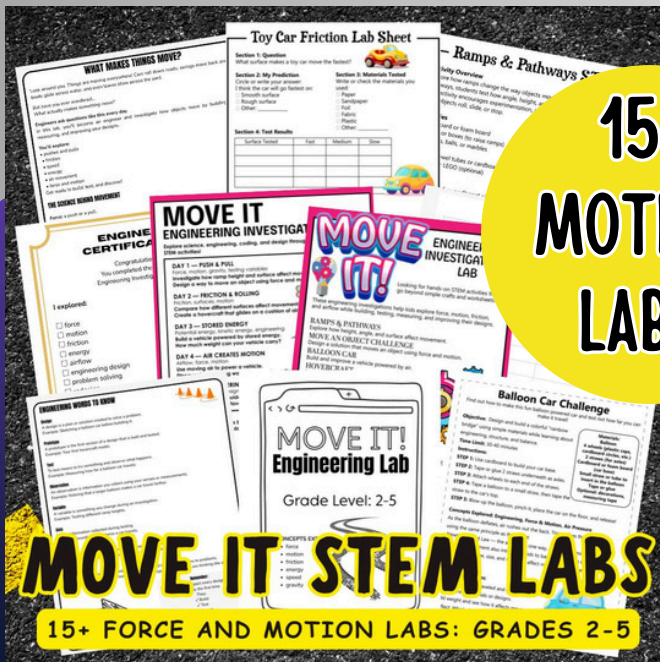
NEXT STEPS

LITTLE BINS[™] LITTLE HANDS

IF YOU LIKED THIS ACTIVITY, TRY THESE PROJECTS:



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



TURN THIS INTO A
FORCE AND MOTION UNIT!

MOVE IT STEM LABS



**EVERY PACK
EVERY PRINTABLE**
Get the ALL-
ACCESS PASS!



ALL-ACCESS science & Art Pass

FOUNDATIONS OF SCIENCE: MONTH 2

Theme: Exploring Fall Science From Weather to Wildlife

Audience: Grades 4-6 Science Teachers or Classroom Teachers

Purpose: This month we'll explore how the changing seasons affect weather, plants, animals, and even the ground beneath our feet.

WEEK 1: Weather & Seasons

Theme: How does weather change, and why do we see seasons?

WEEK 2: Plants in Fall

Theme: What happens to plants as seasons change?

WEEK 3: Animals in Fall

Theme: How do animals prepare for winter?

WEEK 4: Earth & Rocks

Theme: What's under our feet? Exploring soil and rocks.

FOUNDATIONS OF ART: MONTH 2

Theme: Integrates the 7 elements of art with famous artist studies and process-based projects.

Audience: Grades 4-6 Art Teachers or Classroom Teachers

Purpose: Explore core concepts, explore basic materials, build dexterity habits.

WEEK 1: Color & Space - "Pointillism Fall Trees"

Artist: Georges Seurat

WEEK 2: Shape & Value - "Castle and Sun Collage"

Artist: Paul Klee

WEEK 3: Repetition & Form - "Polka Dot Pumpkins"

Artist: Yayoi Kusama

WEEK 4: Storytelling & Texture - "Story Quilts"

Artist: Faith Ringgold

✓ Never Expires!

✓ Monthly Science & Art Lessons!

✓ All Our Packs & Printables!

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.