BC SRC 2018: Motion Commotion!
Program (Ages 9-12), Theme 1: On the Go!
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ICEBREAKER

Race Car Names

Before the program, print off car names associated with colours on individual slips of paper and sort by colour. The link below has a list you can pull from:

330 Car Names by Colour
https://axleaddict.com/cars/car-names

At the beginning of the program, ask each participant to introduce themselves and state the colour of their dream car. Depending on which colour they state, they will pick a corresponding slip of paper and that will be their random car name. When they make their balloon powered race car, they may decide to use this name or not.

ACTIVITY

Plane, Train, or Automobile?

Participants guess whether a given name is the name of a plane, train, or automobile. A list of examples is provided below. You can do this in any number of ways. Some examples:

- Worksheet – Individual or groups. Have a list of names and get participants to circle "plane", "train, or "automobile". You can also have images of the vehicles and get them to match the images to the name.
- Group guess – Hold up a piece of a paper with the name of the vehicle on one side and the answer (image or word) on the other. Ask the kids to guess/vote on the answer and flip to reveal the answer.

Name	Type	Name	Type	Name	Type
Batmobile	Auto	Spirit of St. Louis	Plane	Gremlin	Auto
Wright Flyer	Plane	Jacobite	Train	Polar Express	Train
Flying Scotsman	Train	Trans-Siberian	Train	Spruce Goose	Plane
Ecto-1	Auto	Hogwarts Express	Train	Tin Lizzie	Auto
TranzAlpine	Train	Flying Fortress	Plane	Enola Gay	Plane
Piper Cub	Plane	California Zephyr	Train	Orient Express	Train
Super Chief	Train	General Lee	Auto	Lunatic Express	Train
X-1	Plane	Memphis Belle	Plane	Rambler	Auto
City of New Orleans	Train	Glamorous Glennis	Plane	Mach Five	Auto
Mystery Machine	Auto	Popemobile	Auto	Skylark	Auto

ACTIVITY

Balloon Powered Race Car

Objective:

Create a simple car and use a balloon to "power" the car in a race.

Materials:

- Foam core 3 x 6" (7.5 x 15 cm)
- Wooden food skewer, 12" (30 cm) long skewers
- Regular cardboard
- 2 Straws
- Strong tape (like duct tape)
- 10" (25 cm) Balloon
- Scissors
- Lid from a 2L bottle
- Pencil
- Ruler

Resources:

Balloon Powered Race Car
https://www.stevespanglerscience.com/lab/experiments/balloon-powered-race-car/
(This link includes step-by-step instructions, images, and a video demonstration.)

Balloon Powered Car Challenge
https://www.sciencebuddies.org/science-fair-projects/project-ideas/Phys_p099/physics/balloon-powered-car-challenge#summary

Build a Balloon Powered Car
https://www.scientificamerican.com/article/build-a-balloon-powered-car/

Easy Balloon Jet Car Tutorials
https://www.youtube.com/watch?v=IacekOC-gwI

Balloon Powered Car
https://www.youtube.com/watch?v=zcHLdCI3Ygw