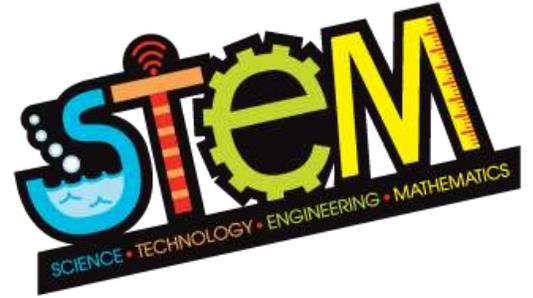


# Summer 2019: Transportation Engineering

## Moving with



*Moving with STEM* is a **FREE** Environmental Education program offered over the summer months to local camps and recreation programs.

Moving with STEM is an extension of the Environmental Education Program offered by goHunterdon, the local non-profit organization dedicated to promoting sustainable transportation in Hunterdon County.

This year, the summer offerings will focus on **Transportation Engineering**. Each session will offer a fun, interactive, “hands on” activity to engage young minds beyond the classroom. Activities are designed to meet the needs of students in Grades K-5. Each activity is conducted within a 45 minute to 1 hour time slot. However, the activities can also be altered to fit the schedules of even the busiest camps. Activities can be held indoors or outdoors, making them wonderful “rainy day” options.

Our specially trained staff will come to you your location and will provide all of the materials needed for campers to keep moving with STEM this summer!

For additional information or to schedule a session please contact:

Nathan Charron  
Environmental Education Coordinator  
[ncharron@gohunterdon.org](mailto:ncharron@gohunterdon.org)



*goHunterdon is a 501c3 non-profit organization dedicated to promoting sustainable transportation in Hunterdon County, NJ. All programs and services are provided free of charge.*

# TRANSPORTATION ENGINEERING

## Kindergarten – 2nd Grade

### Exploring Ramps and Friction

Cars and a ramp are the basis of this simple activity to help campers discover the impact of friction on motion. Campers will play with toy cars on ramps coated with different materials. Campers will see how different surfaces impact the performance of their car.



### Bridge Building

Campers will use a variety “building materials” to construct a bridge that spans a 12” gap.

Campers will then test the design and strength of their bridge using small weights.



## 3<sup>rd</sup>- 5<sup>th</sup> Grade

### Will Your Boat Float?

Campers will use a variety of materials to design and build a small boat with the goal of being able to support a passenger and cargo. Once built, each boat will be placed into water to test its buoyancy and ability to stay afloat with weights.



### Airplane Cargo

Simple paper airplanes become “Cargo Planes” when campers are asked to design and build planes that will not only fly, but be able to carry a small load. Campers will be provided with several types of paper and related supplies to build an airplane that will hold \$0.10 in pennies. Campers will test their airplane to see which can fly the farthest.

### Wind powered cars

Using materials provided, campers will build a car that relies on wind as its power source. Campers will test their vehicles outdoors to determine which will travel the farthest using only wind power.

