



Virginia Region II Annual Teacher Night at Jefferson Lab 2025

Activity Title: **Friction Road Racers**

Type: Student Activity

Grade Level: Grade 8

Time Allotment: 1 hour

Objectives with Correlated SOLs:

1. Students will recognize the direction of the force of friction. (PS.8)
2. Students will explain why force must be exerted continually to keep an object sliding across a carpeted surface. (PS.8)
3. Students will create programs which specify the order in which instructions are executed within a block-based program. (CS8.1)
4. Student will refine a program based on results from their test cases. (CS8.2)
5. Students will communicate effectively to solve a problem. (CS8.3)

Materials List (including equipment):

- 1 friction maze per group
- 1 iPad per group (with Sphero application installed)
- 1 Sphero per group

Teacher Contact Information:

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