DESIGN YOUR OWN ROUNDABOUT

Students will put their engineering skills to the test while improving safety on the road.

Roundabouts do an incredible job of making the roads safe for all people, whether driving, walking, or riding a bike. Yet, a lot of people don't understand how they work or what they do. In this lesson, students will learn about the value of roundabouts, and they'll even design their own using pipe cleaners.

Time Required:
15-30 minutes

Materials
- Pipe cleaners
- Toy cars
- Safe Intersections handout

Prep:
Gather pipe cleaners, making sure you have enough for students. Print multiple copies of the Safe Intersections handout so all students can view it.

Objective:
Students will learn why roundabouts are safer, compared to traditional intersections. They will also have the chance to build and test their own intersections to better understand how they work.

Elevate Your Lesson:
Here are some ideas for ways to expand this lesson.

- Discuss seatbelts and the value of wearing them.
- Create a standard roundabout so you can do side-by-side tests.

Instructions for the Lesson:

1. TALK ABOUT ROUNDABOUTS.
Research proves how effective roundabouts can be, even reducing fatal crashes by as much as 90%. Either talk to students or have them research the value of roundabouts. Give students Safe Intersections handout to fill out.

Learn about roundabouts at www.dot.ga.gov/GDOT/pages/Roundabouts.aspx

2. BUILD A ROUNDABOUT.
It's time to pull out the pipe cleaners and let students create their own roundabouts. They can either work individually or in small groups, but make sure you have enough pipe cleaners to go around. It might even be a good idea to double up the pipe cleaners so they can stand up to the test of the toy cars.

3. PUT THE ROUNDABOUTS TO THE TEST.
Once everyone has built their roundabout, it's time to put them to the test. Take small toy cars and have students navigate them through the roundabout. Discuss how the roundabout works and impacts speed and potential crashes.