



## Harris Technology Roadshow for Elementary, Middle and High School Students

### Hands-on Electronics for Students

Mix a few Harris engineers, a set of Snap Circuit Kits and a room full of students, and what do you get? A fun, memorable and, not to mention, incredibly educational time for students to learn about electricity and to peak their interest in scientific and engineering careers!

Why do students enjoy this workshop so much?

- The projects are straightforward and tailored for the age of the student.
- The projects are designed to peak curiosity and allow students to discover new concepts on their own.
- The students work together in teams and often teach each other.
- The Harris engineers bring the projects to life and hope to motivate students who may be interested in careers in science or engineering.

### Snap Circuit Model SC-300



This award winning electronics kit uses a unique, safe and easy 'snap together' technique which keeps the students focused on the scientific concepts being covered in the project rather than on meticulous 'wiring' of circuits. Because of this, the students can

successfully complete meaningful projects with very little supervision, and there is always plenty of time left for explanation and discussion.

The kit contains a tremendous number of projects ranging from those that will fascinate a 3<sup>rd</sup> grader all the way up to projects that will interest and challenge a senior in high school.

### Harris provides the Engineers

Harris is proud to offer engineers to lead and assist in these projects. These are people who enjoy science and math and hope to motivate the next generation to consider a career in science or engineering. They will not only share their knowledge with the students but also their enthusiasm for a field that is often misrepresented as boring.

### Workshop Setup

During a typical workshop, 20-25 students will be divided into teams with one snap circuit kit per team. Our engineers will give an overview of engineering and a quick description of selected projects. The students follow the instructions in the manual to complete their projects. As the teams finish, the engineers will follow up with individual and group discussions of the concepts just covered. **Typical sessions run between 45-60 minutes.**



### Topics

The elementary projects add interesting components such a fan, motor or a speaker in combination with music/alarm generating integrated circuit's to describe:

- Basic electrical concepts of current, voltage and resistance
- Parallel and series circuits
- Switches, diodes and fuses

More advanced projects go into more detail on:

- Transistors, photo resistors, capacitors
- AM Radio
- Electromagnetism
- Operation of a motor

### Classroom Requirements

The classroom should have enough tables or desks to accommodate teams of 2-3 students. If a projector with a computer connection is available, the Harris engineers will be able to show a multimedia presentation.

### Contact Information

Please send your requests for a visit to [outreach@harris.com](mailto:outreach@harris.com). Please include date, time, nature of visit, how many students, etc. Harris off-Fridays are preferred, and it's easier to recruit volunteers for half day events or less. We will schedule on off-Fridays first come, first served, and we will confirm if we are able to support within 2 weeks of the event date.

Brevard Public School Contact:  
Ginger Davis – [Davis.Ginger@Brevardschools.org](mailto:Davis.Ginger@Brevardschools.org)

**assuredcommunications**