

Parents, Get Involved with CSEdWeek! It's easy....

Don't know how you can celebrate the impact of computing and bring attention to the need for more computer science education? These ideas should get you started!

Who: Brownie/Girl Scout Troup, Cub/Eagle Scout, groups of friends, faith-based youth organizations or any organized youth group that gathers on a regular basis

What: Pledge (<http://www.csedweek.org/forms/sign/pledge-step1>) to participate in this year's Computer Science Education Week. Schedule a Troup or other organizational meeting during CSEdWeek (December 4-10) and coordinate a fun activity that helps the participating youth better understand the importance of computer science and how it impacts their everyday life.

Examples of activities include:

An **encoding exercise** where the youth develop their own secret codes by assigning a unique number to each letter of the alphabet, they set up their scheme and use it to encode a specific phrase (e.g. "Brownies can do anything" or "Cub Scouts do your best"). Then encode their names or another phrase. Talk about how people spend time thinking about how to encode information to save space, to make encoding/decoding quick, or to make decoding it very difficult. Also talk about what kind of data gets encoded—personal information, financial transactions, military codes, etc.

Take the group on a **field trip** to a local business that would allow the youth to see a computer scientist in action. Set aside some time to talk with the scientists to understand how they got interested in the field of computer science and the growth potential in this area.

Hold a **birthday celebration** for Admiral Grace Murray Hopper, mother of the modern computing age, and discuss her accomplishments and what she meant to the field. Have celebrants talk about how computers and computing affect them and their families. Discuss how computing has changed since Admiral Hopper's groundbreaking work and the many facets of everyday life that rely on her efforts.

Introduce the group to some basic programming tools developed for young people by computer scientists at MIT and Carnegie Mellon. Scratch (<http://scratch.mit.edu/>) is a programming language that makes it easy to create interactive stories, animations, games, music, and art, and to share the creations on the web. Alice (<http://alice.org/>) is a teaching tool for introductory computing that uses 3-D graphics and a drag-and-drop interface to facilitate a more engaging, less frustrating first programming experience. Share these websites with the group and let them start experimenting!

Why: Computing is a key driver of economic growth and societal change. Many of the most exciting and best paying jobs in the STEM fields require knowledge of computer science, but far too few students have the opportunity to explore the field or take engaging and rigorous computer science courses. In addition, the absence of computer science in our schools means that students often don't know about the exciting and lucrative fields and the opportunities it presents those who pursue it. Ensuring access to quality K-12 computer science education is crucial to America's competitiveness in the 21st Century.

Don't forget to record your efforts with CSEd Week! Sign up for the pledge and get more ideas and resources at www.csedweek.org.