



Tips for Girls

Generation STEM: What Girls Say about Science, Technology, Engineering, and Math/ Girl Scout Research Institute

The Girl Scout Research Institute conducted a research study on what girls like you think about the fields of science, technology, engineering, and math, or "STEM." Many adults think that girls are not interested in these fields, but this is completely false. We know that girls like STEM, but that many don't have enough information about these careers, what they can do for girls, and how a career in STEM can help a girl make the world a better place. Following are some tips, based on our research findings, about how to become interested, stay interested, and eventually pursue a career in STEM.

Tip 1: Explore the world around you. Ask questions and look for answers. Don't limit yourself!

This study found that girls like to ask questions and solve problems. These are things that scientists and engineers and other STEM experts do all the time—with regard to how to cure cancer, build a bridge, protect the environment, and much, much more. They ask questions, do experiments, and solve problems. Maybe *you* are the type of person who likes to ask lots of questions and look for the answers to them. *Someone* has to go out and solve the big problems in our world—that someone could be you!

Tip 2: Don't be afraid of math and science—you are probably better at it than you think.

Our research shows that girls tend to think they're not very good in math and science—even though they are. In fact, girls do as well or even better in math and science than boys. The problem is that girls don't feel confident about their abilities in these areas. We know that doing well in math and science is the key to having a successful career in a STEM field. So keep working hard in these subjects, ask for help when you need it, and don't be afraid to admit that you're good at these subjects!

Tip 3: Talk to people about STEM careers and get as much advice as you can. Do your own research, too.

Girls say they don't know very much about STEM careers, especially engineering. Find out for yourself! Check out http://www.girlscouts.org/imagineengineering/ to learn what an engineer does. Go on a Journey in the *It's Your Planet—Love it!* series. You'll find out how scientists help protect the environment. Or earn one of the new Science & Technology, Innovation, or Naturalist badges. Search online for STEM careers, and pick out the coolest one you can find—like psychometrician, a person who measures people's knowledge, skills, and abilities. Or how about ethical hacker, a person who learns how to be a computer hacker in order to protect against computer hacker criminals?

Talk to your science teacher, your parents, and/or someone you know who's in a technical or scientific career. A mentor in a STEM field can help you determine the types of math and science classes you should take in high school and the majors you could consider in college. She/he can help you get inspired and make a plan for your future.

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STEM fields are growing faster than any other job field out there. By the time you're ready to start your first career, STEM will be the area where the most jobs are available. The more you find out about the many careers out there, the better equipped you'll be to set the best possible career path for yourself.

Tip 4: Make the world a better place ... through STEM.

When girls were asked what they want to get out of a future career, almost all of them said they want to have a job they love, help people, and change the world for the better. Is this what you want out of a career one day, too? STEM careers can help you achieve this goal. You can make discoveries and cure diseases. You can have a hand in inventing the most cutting-edge technology that helps people communicate and work together. You can develop a new computer or video game (and test it, too!). You can help our country protect itself against terrorism and other threats. You can travel to space or fly a plane across the world. The possibilities for helping the world through a career in STEM are endless!

Tip 5: Sign up for a fun program to learn more about STEM—there are great opportunities in many communities.

There are plenty of opportunities to learn more about STEM through after-school programs, summer camps, school clubs, museums, and more. You can develop your interests through hands-on activities, experiments, games, and contests with your friends and peers. Check out your local science museum, or enter a video game challenge with a few of your friends. Here are some websites that offer STEM programs and can help to further your STEM interest:

Girl Scouts of the USA:

http://www.girlscouts.org/program/basics/science/ http://www.girlscouts.org/program/journeys/your_planet/

Sesame Workshop/National STEM Video Game Challenge: www.stemchallenge.org

Girls, math, and science partnership: http://www.braincake.org/

