



Cool Careers in STEM

Inspire students to dream big by exploring well-known and not-so-common careers in science, technology, engineering, and math fields.

Architect

Architects use math and technology to create blueprints, determine which materials are best suited to build structures, and ensure that their creations are symmetrical, practical, and structurally sound.

Try it at home: Use construction toys like K'nex or Lego to put your math, physics, and geometry skills to use. Try creating structures with different shapes; which are the most stable, the best able to withstand high winds (from a floor fan), the most efficient in terms of materials needed?

Archivist

Archivists use a combination of important science and technology skills to ensure that photos, letters, artwork, and other valuable pieces of history are properly organized, stored, and preserved. Archivists' skills ensure that the passing of time, weather elements, and other external factors affect the quality of these items as little as possible, and they make it possible for future generations to learn from the past.

Try it at home: Conduct a sweep of your home to make sure all important family documents are stored properly. Is everything out of the sunlight and in an atmosphere that is not too warm? Are precious photos in albums or laminated, and stored away from the elements? You can also visit a local library or museum to observe how experts in your community are preserving valuable pieces of history.

Astronaut

Astronauts are the brave explorers of outer space, using their science skills and technical know-how to safely pilot spaceships and collect valuable information to share with other scientists, leading to advancements in space technology and exploration. Whether they orbit our

planet, work at the International Space Station, or travel to the moon or other planets, astronauts are fundamentally explorers and problem-solvers.

Try it at home: Study the planets from your own living room and build a miniature solar system. Create the Sun and planets using different-size foam balls, color them with acrylic paint, and use toothpicks or dowels to connect them together.

Chemist

Chemists research, measure, and experiment with chemical compounds and study the reactions between different elements. Chemists' work is everywhere—because of these STEM experts, we know what ingredients can be combined in a cooking recipe, what medicines are safe to put into our bodies, and how chlorine works to clean a pool without harming swimmers.

Try it at home: The volcano experiment is a classic for a reason: It's simple to set up using household items, it's an easy-to-see example of chemistry at work, and it's a favorite among kids. Use clay to build the volcano, add some dish soap and baking soda, then throw in some vinegar to trigger the eruption!





Energy Engineer

Energy engineers study how we can most efficiently and sustainably use energy as well as how to produce energy through natural resources, like wind turbines and solar panels. They are focused on finding efficient, clean, and innovative ways to supply energy. They also research and develop ways to generate new energy, reduce emissions from fossil fuels, and minimize damage to the environment.

Try it at home: Do an “energy audit” of your home to find ways for your family to conserve more energy. Could the air conditioner be switched to energy-saver mode? Is the television running when nobody is in the room? Is there a leaking faucet that could be fixed? Keep a log of how often these electrical appliances are running and offer recommendations of what can be adjusted to save energy.

Microbiologist

Microbiologists study the growth and development of tiny organisms. These scientists are key in medical fields, too, because they include unhealthy bacteria and viruses in their research.

Try it at home: Composting is a great way to see microorganisms in action and to recycle in the process! Help collect food and plant waste to create a compost pile outside. Good microorganisms will feed off of this material, breaking it down and helping create nutritious soil for your garden.

Nutritionist

Nutritionists help others make healthy, smart food choices, using chemistry and math to evaluate foods’ fat, proteins, carbohydrates, calories, and other important factors.

Try it at home: Turn the grocery store into a classroom. Help your parents choose fruits, vegetables, and healthy

items from the other food groups to plan tasty, colorful, nutritionally balanced meals for your family.

Park Naturalist

Park naturalists study the animals, plants, and trees in our state and local parks. These science experts have a wealth of knowledge and can provide valuable information, such as the names of animals and plants that reside in your neighborhood park and what environment these species need to thrive.

Try it at home: Become a park naturalist in your own city. Visit a nearby park and try to identify some of the plants and animals that call it home. Take pictures, then ask a professional naturalist to tell you more about the ones you don’t recognize.

Product Safety Engineer

Product safety engineers use STEM skills to develop and conducts tests to evaluate whether a product, such as airbags in a vehicle, can be used safely. They recommend changes that will reduce or eliminate risks and hazards. And if a worker gets injured or his health is affected on the job, a product safety engineer will investigate to determine the cause of the issue and develop a solution to keep it from happening again.

Try it at home: Invent a product to assist your parents with a household task, then test it to confirm whether it’s safe. Questions to consider include: Are the materials I used strong enough to support my invention when performing the action? How many of these products will be needed to help with the task? Are there any potentially hazardous materials in my invention or dangers when using it?

Teacher

Educators who teach students about science, technology, engineering, and math are responsible for inspiring the next generation of students to consider studying or working in STEM-related fields.

Try it at home: Get the whole family involved! Think about your favorite STEM-related subject from school and share it with your family. You can craft a “lesson plan” with important points about the topic and a fun activity or even a “homework assignment” for your parents related to the subject.