



STEMtastic Summer Challenge



Summer is the perfect time of year to explore STEM and try new things!

Fulfill at least the minimum number for your program level between June 1 and August 31, 2023.

Visit the GSCTX shop to purchase your patch.

- ☐ Create art using crayons and the sun
- ☐ Try a new mode of transportation: boat, plane, train, bus...
- ☐ Cross three different kinds of bridges: suspension, lift, truss, arch...
- ☐ Ask an architect or builder to show you how to read blueprints
- ☐ Be an engineer and build a play fort
- ☐ Write an algorithm for making a sandwich
- ☐ Watch fireworks and call out the elements that make up the colors: green=barium, blue=copper, yellow=sodium, red=strontium, orange=calcium
- ☐ Try a family citizen scientist activity with the SciStarter app
- ☐ Make a musical instrument with a rubber band to explore sound vibrations
- ☐ Find out with the SPF on your sunscreen means
- ☐ Watch for a rainbow after a storm. How does the light break into colors?
- ☐ Create a board game using math concepts and recycled materials
- ☐ Talk to someone who is programmer
- ☐ Take a ride to watch wind towers creating clean energy
- ☐ Browse a fabric store and find materials that are soft, rough, thick, thin, waterproof, and sparkly
- ☐ Cook something using foil wrap, a box, and the sun
- ☐ Visit a dam or hydroelectric plant
- ☐ With an adult, use GPS to locate a geocache
- ☐ Invent an outdoor game that uses two different senses
- ☐ Make up a secret code and send notes to a friend
- ☐ Find symmetry in nature and take a photo of it or draw it
- ☐ Draw a design for a device that makes life easier for a differently abled person
- ☐ Make a cardboard and rubber band car that goes
- ☐ Design and draw a picture of a future mode of transportation
- ☐ Explore space science by tracking phases of the moon for several weeks
- ☐ Find a local stream and determine what larger body of water it will flow into
- ☐ Propagate a plant
- ☐ Go on a fossil hunt
- ☐ Explore space science by identifying a planet or a constellation
- ☐ Ask an adult for a story about something that was invented in their lifetime
- ☐ Collect seashells and use a guidebook to find their scientific names
- ☐ Experiment with paper airplanes to make them go faster, farther, and straighter
- ☐ Learn how to use thunder to determine your distance from a lightning strike
- ☐ Investigate three different careers in the medical sciences
- ☐ Solve a problem with a piece of duct tape
- ☐ Make fingerprints on paper using a washable marker; add arms, legs, and eyes for fun!
- ☐ Make a beauty product with common items from the kitchen
- ☐ Double a recipe or cut it in half
- ☐ Build a sandcastle
- ☐ Create a safe cleaning product using common ingredients from the kitchen
- ☐ Use a cup and ruler to measure rainfall

- ☐ Learn about energy conductors/insulators and how to keep safe in an electrical storm
- ☐ Make something using wire cutters and pliers
- ☐ Explore static electricity with a blown-up balloon
- ☐ Pick out a paint color and watch it get mixed at the store
- ☐ Build a shelter for a fairy from found objects that will give it protection from wind and rain
- ☐ Investigate three different programmer careers
- ☐ Look at something up close: use a magnifying glass, microscope, or binoculars
- ☐ Use yeast to bake bread that rises
- ☐ Upcycle a tin can into something fun or useful
- ☐ Investigate three different engineering careers
- ☐ Visit a car dealer and ask about safety features on cars
- ☐ Hunt through a hardware store and find wire, rope, screws, and tape
- ☐ Visit a science museum
- ☐ Make an article of clothing using a new tool or method
- ☐ Identify three species and common names of plants that you don't know
- ☐ Use a tool you've never tried before to fix or make something useful
- ☐ Sew something using a sewing machine
- ☐ Find directions to a favorite place by using both a paper map and a smart phone map
- ☐ Upcycle old newspaper or magazines into a piece of jewelry
- ☐ Pick a home appliance and compare model features in the store
- ☐ Talk to someone who is an engineer
- ☐ Try a fruit or vegetable that you've never tasted before
- ☐ Investigate three different space science careers
- ☐ Throw a ball and use your feet to estimate how far you threw it
- ☐ Use a cup and ruler to measure rainfall
- ☐ Send GSCTX pictures of your STEM adventures to programs@gsctx.org

Number of activities required by program level					
Daisy	Brownie	Junior	Cadette	Senior	Ambassador
15	20	25	30	35	35

Questions? Email programs@gsctx.org

Don't forget to visit the Girl Scouts of Central Texas store to get your patch!



The minimum number of STEMtastic activities I need to fulfill is:

The number of STEMtastic activities I want to complete is:

My STEMtastic grand total as of August 31, 2022 is: