

Summer is the perfect time of year to explore STEM (science, tech, engineering, math) and try new things!

Fulfill at least the minimum number for your grade level between July 1 and August 31, 2019. Once you hit your minimum, you can come into any GSWNY shop to place your patch preorder by September 30, 2019. *The patches will arrive in late October.*

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|---|--|---|
| <input type="checkbox"/> Create art using crayons and the sun | <input type="checkbox"/> Talk to someone who is a programmer | <input type="checkbox"/> Find a local stream and determine what larger body of water it will flow into |
| <input type="checkbox"/> Try a new transportation mode: boat, plane, train, bus... | <input type="checkbox"/> Take a ride to watch wind towers creating clean energy | <input type="checkbox"/> Propagate a plant in your flower garden |
| <input type="checkbox"/> Cross 3 different kinds of bridges: suspension, lift, truss, arch... | <input type="checkbox"/> Browse a fabric store and find materials that are soft, rough, thick, thin, waterproof, and sparkly | <input type="checkbox"/> Go on a fossil hunt |
| <input type="checkbox"/> Compare 3 different habitats at a zoo | <input type="checkbox"/> Cook something using foil wrap, a box, and the sun | <input type="checkbox"/> Explore space science by identifying a planet or constellation |
| <input type="checkbox"/> Ask an architect or builder to show you how to read blueprints | <input type="checkbox"/> Visit a dam or hydroelectric plant | <input type="checkbox"/> Ask older folks for a story about something that was invented in their lifetime |
| <input type="checkbox"/> Be an engineer and build a play fort | <input type="checkbox"/> With an adult, use a GPS unit or smartphone to locate a geocache | <input type="checkbox"/> Collect seashells and use a guidebook to find their scientific names |
| <input type="checkbox"/> Write an algorithm for making a sandwich | <input type="checkbox"/> Invent an outdoor game that uses 2 different senses | <input type="checkbox"/> Experiment with paper airplanes to make them go faster, farther, and straighter |
| <input type="checkbox"/> Watch fireworks and call out the elements that make up the colors: green=barium, blue=copper, yellow=sodium, red=strontium, orange=calcium | <input type="checkbox"/> Make up a secret code and send notes to a friend | <input type="checkbox"/> Learn a formula to determine distance from a lightning strike |
| <input type="checkbox"/> Try a family Citizen Scientist activity with the SciStarter app | <input type="checkbox"/> Find symmetry in nature and take a photo or draw a picture of it | <input type="checkbox"/> Investigate 3 different health/medical careers |
| <input type="checkbox"/> Make a musical instrument with a rubber band to explore sound vibrations | <input type="checkbox"/> Draw a design for something that makes life easier for those with disabilities | <input type="checkbox"/> Solve a problem with a piece of duct tape |
| <input type="checkbox"/> Find out what the SPF on your sunscreen means | <input type="checkbox"/> Make a cardboard and rubber band car that goes | <input type="checkbox"/> Make fingerprints on paper using a washable marker; add arms, legs and eyes for fun! |
| <input type="checkbox"/> Watch for a rainbow after a storm. How does the light break into colors? | <input type="checkbox"/> Design and draw a picture of a future mode of transportation | <input type="checkbox"/> Make a beauty product using common items from a kitchen |
| <input type="checkbox"/> Create a board game using math concepts and recycled materials | <input type="checkbox"/> Explore space science by tracking the phases of the moon for several weeks | <input type="checkbox"/> Double a favorite recipe or cut it in half |
| | | <input type="checkbox"/> Build a sandcastle |

Flip to side 2 for more

- Create a safe cleaning product using common ingredients from a kitchen
- Make something using wire cutters and pliers
- Learn about energy conductors/insulators and keeping safe in an electrical storm
- Explore static electricity with a blown-up balloon
- Pick out a paint color and watch it get mixed at the paint store
- Build a shelter for a fairy from found objects that will give protection from wind and rain
- Investigate 3 different programmer careers
- Look at something up close: use a magnifying glass and/or binoculars
- Upcycle a tin can into something fun or useful

- Use yeast to bake bread that rises
- Investigate 3 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 3 species and common names of plants that you never knew before
- Use a tool you've never tried before to fix or make something useful
- Sew something using a sewing machine
- Write an algorithm to help you walk or ride to a playground

- 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 a store
- Talk to someone who is an engineer
- Try a fruit or vegetable that you never tasted before
- Investigate 3 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 GSWNY pictures/videos of your STEM adventures to communications@gswny.org to be featured on social media

NUMBER OF ACTIVITIES REQUIRED PER GRADE LEVEL					
DAISY	BROWNIE	JUNIOR	CADETTE	SENIOR	AMBASSADOR
20	25	30	35	40	45

Questions? Email girl.experience@gswny.org

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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, 2019 is: