

Summer STEMtastic Bucket List Challenge



Between now and August 31st, complete a minimum of ten STEM activities on the list.

Once the activities are completed, fill out the form on the attached link with a summary of what you completed and submit electronically to confirm that you have earned the Summer STEMtastic Bucket list Challenge patch. You will be notified via email when the patches are available in the shop for purchase.

<https://gsnc.wufoo.com/forms/summer-bucket-list-patch-request>

- ☐ Create art using crayons and the sun
- ☐ Try a new transportation mode: boat, plane, train, bus, etc
- ☐ Cross three different kinds of bridges: suspension, lift, truss, arch
- ☐ Compare three different habitats at a zoo
- ☐ 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
- ☐ Make a musical instrument with a rubber band to explore sound vibrations
- ☐ Find out what 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 a 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 a GPS unit or smartphone 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 or draw a picture of it
- ☐ Draw a design for something that makes life easier for those with disabilities
- ☐ 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 the 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 in your flower garden
- ☐ Go on a fossil hunt
- ☐ Explore space science by identifying a planet or constellation
- ☐ Ask older folks 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 a formula to determine distance from a lightning strike
- ☐ Investigate three different health/medical careers
- ☐ 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 using common items from a kitchen
- ☐ Double a favorite recipe or cut it in half
- ☐ Build a sand castle
- ☐ 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 three 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 three different engineering careers
- ☐ Visit a science museum
- ☐ Make an article of clothing using a new tool or method
- ☐ Sew something on a sewing machine
- ☐ Write an algorithm to help you walk or ride to the playground
- ☐ Upcycle old newspaper or magazines into a piece of jewelry
- ☐ Try a fruit or vegetable that you have never tasted before
- ☐ Investigate three different Space Science careers



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