

WINTER/SPRING STEM EXPLORER CHALLENGE 2021

From February 1ST until May 1ST complete the required amount of activities for your grade level.

Daisy – 10
Brownie – 15
Junior – 20
Cadette – 25
Senior 25
Ambassador – 25



- ☐ 1. Make a bottle rocket
- ☐ 2. Build a bridge out of popsicle sticks
- ☐ 3. Sketch a robot prototype design
- ☐ 4. Play a board game
- ☐ 5. Discover forces in motion on an amusement park ride (YouTube videos)
- ☐ 6. Build a sandcastle
- ☐ 7. Research three new facts about an animal
- ☐ 8. Create digital artwork
- ☐ 9. Spot a rainbow
- ☐ 10. Extract DNA from fruit
- ☐ 11. Make bubbles
- ☐ 12. Play a card game
- ☐ 13. Design your own meme
- ☐ 14. Build a fort out of household items
- ☐ 15. Make slime
- ☐ 16. Go stargazing
- ☐ 17. Learn words in a different language
- ☐ 18. Create a piece of jewelry
- ☐ 19. Research an invention that you use commonly
- ☐ 20. Attend a virtual STEM festival

- ☐ 21. Make a body tracing on a large sheet of paper and label different parts of the body
- ☐ 22. Make a colorful campfire
- ☐ 23. Try out coding (free activities online)
- ☐ 24. Do a fun science experiment
- ☐ 25. Make rock candy
- ☐ 26. Learn how to determine your distance from a lightning strike during a storm
- ☐ 27. Make a Rube Goldberg machine
- ☐ 28. Play I Spy with a fellow Girl Scout or a family member
- ☐ 29. Attend a virtual Girl Scouts STEM Program
- ☐ 30. Make your own stethoscope
- ☐ 31. Use balloons to create static electricity
- ☐ 32. Become a master of disguise
- ☐ 33. Play a Girl Scouts-friendly video game
- ☐ 34. Watch a meteor shower
- ☐ 35. Celebrate Pi Day on March 14th
- ☐ 36. Create a DIY periscope
- ☐ 37. Make your own juice creation
- ☐ 38. Make s'mores in a solar oven
- ☐ 39. Use AI to find the answer to a question
- ☐ 40. Record a short film
- ☐ 41. Make paper airplanes and race
- ☐ 42. Discover what makes your fingerprints unique
- ☐ 43. Track a hurricane's path
- ☐ 44. Visit a local STEM attraction virtually
- ☐ 45. Learn about the planets in our solar system
- ☐ 46. Complete a jigsaw puzzle
- ☐ 47. Make a binary code bracelet or other binary code craft
- ☐ 48. Write an algorithm to help you complete an everyday task
- ☐ 49. Build a bird house
- ☐ 50. Celebrate National Engineers Week in February
- ☐ 51. Make a model car
- ☐ 52. Go on a search for fossils
- ☐ 53. Perform the egg drop engineering challenge
- ☐ 54. Take a survey of your family members' favorite invention ever created
- ☐ 55. Look at the night sky through a telescope
- ☐ 56. Bake a yummy treat
- ☐ 57. Design an obstacle course
- ☐ 58. Read the weather forecast for your local area
- ☐ 59. Learn simple origami techniques and try them out
- ☐ 60. Learn about different blood types
- ☐ 61. Learn about different constellations and look for them in the sky
- ☐ 62. Make an all-natural skincare product using commonly found household items

Contact the Council Shop to order your patches at customercare@citrus-gs.org. Patches are \$3.00 each. For questions about this challenge please contact customercare@citrus-gs.org.