



**Daisies and Brownies complete 3 activities, Juniors and up complete 4 to earn your Math Mania Patch!**

**Math and Coding**— Learn about shapes and patterns through the “Code with Anna and Elsa” Hour of Code activity. <https://hourofcode.com/frzn>. For older girls, try out the unplugged Color By Pixel activity to learn about computer graphics. <https://codehs.com/uploads/40baf83c2547910235cebc2c1f4839a4>

**Math in Games**— Math can be fun with some dice, cards or other games. Try playing Yahtzee, Farkle, Quirkle, Set or others games. These kinds of games teach pattern recognition, sequencing, logic, math facts and more. Here are some dice games to get you started: <https://icebreakerideas.com/dice-games/>.

**Cookie Math**—Are you getting ready for booth sales? Make sure you know your numbers. How much does a box of cookies cost? Do a role play with cookie boxes and fake money and practice counting change. Switch it up so girls can practice being a customer and a cookie seller. This is a great time to practice your sales pitch too!

**Math in the Kitchen**—Try out a new recipe for cookies, cake, or another fun item. As you follow the recipe, learn about fractions, measuring tools and more. Need a challenge? Try a double or triple batch and do the math to make dessert for all your friends! Bonus: Try out your budgeting skills by shopping for supplies. Add up the cost of ingredients as you go and compare the prices for different brands.

**Math in Design and Construction**—Measure twice cut once! Creativity combined with mathematics can create some amazing results. Try designing and building something—a cardboard house for your cat, a wooden birdhouse, or your own idea. You could also try your hand at redesigning your room. Measure the space, your furniture and see how you can move things around. <https://www.education.com/download-pdf/activity/50533/>

**Snow Math**—Get outside. Using snowshoes or just your boots, stamp out a pattern using shapes in the snow. Plan your design first by drawing your design and deciding how many steps each line will take. Learn some geometry along the way as you incorporate triangles, circles, parallelograms or other shapes in your design. Get some inspiration for your snow art by checking out Simon Beck’s art. It takes all day and miles of walking to create these patterns. <https://www.facebook.com/snowart8848>

**Fast Math**— Try out skiing, sledding, hiking or another activity and do some calculations. First measure the distance you will go. You could use a tape measure or meter stick for a shorter distance and for a longer distance or curvy path measure a length of yarn and then use that to measure distance. Next use a stop watch to time yourself as you sled down the hill or snowshoe on a trail. To calculate your speed, take the distance and divide it by the time it took you. For example, if it takes 10 seconds to sled 300 feet, you would take 300 feet/10 seconds and get 30ft/second. Use a calculator to help you if needed. For older girls, try converting to another unit like miles/hour. Remember to be safe and check out the Safety Activity Checkpoints for any activities you will be trying. <https://tinyurl.com/GSAKSafetyCheckpoints2019>

**Order your patch online here:** <https://www.cognitofrms.com/Girlscoutsalaska/GSAKPatchOrderForm>

Questions? Or need a paper form? Contact the program team at [program@girlscoutsalaska.org](mailto:program@girlscoutsalaska.org)

