

# Connecticut's Summer Math Passport

# **Students Entering Grade 8**



#### **Family Learning Beach**

Watch who shows up at the beach for an hour. Tally the number of people who are kids and adults.

- · What percent of kids go to the beach?
- · What percent of adults go the beach



#### **Family Learning Farmer's Market**

At the farmers market, go to one of the vendors and ask what their most popular item is.

· What vendor did you go to and what is their most popular item?

To simulate their most commonly purchased item, you could write the name of each item they sell on a piece of paper and put it in a bag, draw from the bag 100 times, and see which item is chosen the most.

- Why is this simulation a bad way to figure out the most commonly purchased item from this vendor?
- How might you create a simulate for this situation in order to get a good prediction of the most commonly chosen vendor?



#### **Family Learning Gardening**

You are helping a neighbor replant his jade tree. He currently has the tree in a square pot that is 14 inches wide and 14 inches tall. He would like to put the tree in a round pot. The pot should have a diameter that is a couple of inches bigger than 14 inches so that the plant has room to grow. Head to the garden center to find a new pot for your neighbor. Your neighbor wonders how much more soil he will need for the new pot.

- · What is the volume of each pot?
- · What is the difference in the volume of the two pots?
- What is your recommendation to your neighbor on what he will need for soil? (If you are unable to visit a garden center, you can look online.)



### Family Learning Walk or Hike

Measure the distance and time for you to walk a trail. Can you use a proportion to determine the time it would take if your trail was 13 miles?

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#### **Family Learning Ice Cream Shop**

Go to your local ice cream shop. Determine what size ice cream is closest to 1 cup and use this price to determine the cost of a gallon and pint of ice cream.

- 1. If the ice cream shop sells ice cream in 1 gallon tubs or in pints, how much does it charge for these sizes?
- 2. How do the shop's actual prices compare to your calculations? (1 gallon = 128 ounces; 1 pint = 16 ounces; 1 cup = 8 ounces)



## **Family Learning Movement**

Find a friend. Take turns to do push-ups for 2 minutes.

- · What is the rate for you?
- · What is the rate for your friend?
- · Do the two rates form a proportion?



### **Family Learning Playground**

Bring a measuring tape to the playground. Find three different triangles and classify each triangle used in the playground. Draw a model of the triangles below.