THE COMMISSIONER'S 2026 SUMMER MATH CHALLENGE

Connecticut's Summer Math Passport

Students Entering Grade 5

Family Learning Beach

You need a collection of rocks and shells (or any two objects you can find) to add decoration to your sand castle. Three-quarters of the collection needs to be shells.

- How many objects could you have?
- How many would be shells?
- If you wanted to make two sandcastles, how many shells would you need? What equation represents your answer?

Family Learning Farmer's Market

A farmer has 48 ounces of fruits and vegetables at the farmer's market. They sold two pounds of the fruits and vegetables. How many pounds does the farmer have left?

Family Learning Gardening

Imagine you are asked to help create a flower border for a path that is 20 feet long. Head to a local garden center and select one flower that is your favorite that you would like to use for the border. Plants usually come with tags that provide information about their growth and needs. *(If you are unable to visit a garden center, you can research information about a plant.)*

- How far apart must this flower be planted from another?
- How many of this type of flower will you need to buy to line the border of the path?
- How could you represent this?

Family Learning Walk or Hike

Find out the distance of the trail you will walk or hike today. Convert the distance from miles into feet? About how many yards is that?

Family Learning Ice Cream Shop

Assume each topping container at your local ice cream shop is 3 inches by 5 inches. What would the dimensions of the display case need to be to hold them all? (If you can't get to an ice cream shop, try this problem with 12 possible toppings.)

Family Learning Movement

Draw a numberline outside with wide even spacing with values between 0–5, marking fractions or decimals between each whole number (e.g., 0, .5, 1, 1½, 2, etc.).

- Pick a number to start on. Take turns calling out directions like add or take away 3.75. What do you notice about the distance between you and your partner when you are both traveling the same distance as the same time? Does the distance

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between you both stay the same, or change? Why do you think so?

- Take turns calling out directions like triple your number or halve your number. What do you notice about the numbers as you continue to double them? Cut them in half? Cut them into thirds?
- Double, triple, or quadruple your number by hopping, skipping, or jumping along the numberline. Does the distance stay the same between you and the other players? Why or why not?
- What else do you notice when you keep on doubling your numbers? How does it compare to tripling?

Draw a numberline outside with wide even spacing with decimal values of tenths between 0–2.

- Write 2- or 3-digit decimal numbers (0.25, 1.03, 1.57, etc.) on cards and turn them face down or have a family member call out a number. Find the best spot on the number line where you think the number belongs, mark it with an X and stand there. Is it closer to 0? 1? 2? How do you know?
- Numberline relay: Write a bunch of 3 digit decimal numbers on pieces of paper (index cards, etc.). Mix them all up and put them on a starting spot off the numberline. Flip up a card and race to place the card where you think the number belongs. Then run back and get another card. This can be played in teams so that kids need to think about where the numbers are being placed compared to their opponent's.

Create a coordinate grid rather than a number line by drawing two intersecting number lines at a right angle.

- Decide where to stand and take turns calling out directions either by calling coordinate pairs or by adding or subtracting along the x,y (horizontally or vertically).
- What do you notice about your position when you add 1 to each ordered pair? (1,1), (2,2), (3,3)?
- Trace your movements with a different colored chalk. What do you notice?
- What happens if you multiply your ordered pairs?

Create a design on a piece of paper and map it out on your coordinate grid. Have a family member call out the coordinates as you mark the points. Then connect them. You just replicated a giant version of your design!

Treasure Map:
Create a coordinate grid of your yard on a piece of paper. Mark points on your paper grid where you want your treasures to be. Then, place "treasures" or secret messages on points in your yard. They can be notes, plastic eggs, rocks, etc. Then, see if a family member can find your secret treasures by following your coordinate grid.

Family Learning Playground

Bring a tape measure with you to your local playground, or you can use your own foot to estimate. Measure or estimate the perimeter of the playground. Now find the area. Record your measurements below. If you are able to visit a different playground, find the difference between the areas and perimeters of the two playgrounds. Record your findings.