the commissioner's
2023 SUMMER
MATH
CHALLENGE

## Connecticut's Summer Math Passport Family Learning Beach



## Students Entering Grade K

Collect a group of rocks or shells and sort them into different groups:

- Color
- Size
- Shape


## Students Entering Grade 1

Collect 10 rocks or shells. Separate some of the rocks or shells into one group.

- How many are in the other group?
- How many different ways can you break apart the number 10?
- Use the rocks or shells to show your thinking.


## Students Entering Grade 2

Collect a group of rocks or shells.

- First, estimate how many rocks or shells you think is the same as the length of your beach towel. How did you come up with your estimate?
- Now, use your rocks or shells to measure the actual length of your beach towel.
- Compare the actual length to your estimate.


## Students Entering Grade 3

Create the following arrays using shells or rocks and show how many you used with an equation:

- 2 rows of 6
- 3 rows of 4
- 4 rows of 5
- 5 rows of 5


## Students Entering Grade 4

Estimate the length and width of your beach towel or blanket in feet. Using your estimate, determine the area and perimeter.

## Students Entering Grade 5

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?


## Students Entering Grade 6

Imagine you wanted to build a sandcastle with a volume of 48 cubic inches.

- What could be the length, height, and width of your sandcastle?
- If you decide to make it larger and double each dimension, what would be the volume now?


## Students Entering Grade 7

Collect some shells and rocks.

- What did you collect?
- What is the ratio of rocks to shells?


## Students Entering Grade 8

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

