Entering Third and Fourth Grade
Math Optional Assignment

Below are four weeks of math questions for rising 3rd and 4th graders to complete.

Note: This assignment is recommended for both grade levels; therefore, some questions may be easier or more challenging for your child than others. Support your child as needed.
**Additional suggestions for math games and activities are included on the last page of this document.

Week 1: Camping Trip!

Part 1: Supplies
Your family has decided to start camping! But first you'll need to buy some supplies! You already have a tent, but you have $200 to spend on other supplies. Decide which supplies you will purchase with your $200.

Options:

- Flashlight $15
- Sleep bag $20
- Bug spray $8.50
- Hammock $50
- Food and snacks $30
- S'mores and roasting sticks $7
- Portable barbecue $35
- First aid kit $10
- Outdoor games $15

What items did you purchase? List below.

What was your total cost? Show work below.

How much money do you have remaining? Show work below.

Part 2: Sketch the Campgrounds Map

Your campground map must include equal groups drawn as arrays. Your map could include trees, tents, canoes, benches, etc.

Draw your map on another piece of paper.

List the items included on your map below. Write how many of each item are on the map. Write these as multiplication or repeated addition equations.

(Example: 5 groups of 4 trees = 5 x 4 = 5 + 5 + 5 + 5 = 20)

Map Item	Multiplication Equation

Part 3: Campfire S'mores

You are making s'more with your family and need to figure out how many you can make with the supplies you have.

You have purchased a box of graham crackers. Each box of graham crackers has 6 sealed stacks of 8 graham crackers.

a) How many crackers do you have in total? Show your work below.

b) If each s'more needs two crackers, how many s'mores can you make?

c) Each s'more uses one piece of chocolate and 3 marshmallows. How many marshmallows do you need in all?

d) You have four people in your family. How many s'mores will each person get?

Week 2: Amusement Park

Part 1: Tickets and Parking

You are visiting an amusement park for the day! You have $350 to spend for the day. First you have to pay for tickets and for parking. Each adult ticket is $65 and each child ticket is $40. Parking is $20. A fast pass to cut the line is an additional $35 per ticket. (Note: Decide how many people are coming and stick with this number for all questions.)

a. How much do the tickets, parking and fast passes (if you want to buy them) cost in total? Show your work below.

b. How much money do you have left? Show your work below.

Part 2: Rides
It is currently 10:00AM. Each ride has a different amount of time to wait in the queue. Decide which of the following rides you are going to go on and have enough time to wait for before lunch at noon.

Pirate Ship: 25 minutes
Gravitron: 15 minutes
Rollercoaster: 40 minutes
Log Flume: 20 minutes
Carousel: 5 minutes
Ferris Wheel: 10 minutes
Zipper: 30 minutes

a. Which rides are you going to ride?

b. How many minutes will you have to wait in all? Show your work below.

Part 3: Lunch Time!
You have $20 to spend on lunch for you and all of your family. Pick your food items and calculate the total cost below.

Hot dog: $3.00
Cheeseburger: $3.50
Fries: $2.00
Chicken nuggets: $4.00
Lemonade: $1.50
Fruit punch: $2.00

a. What food items will you purchase? List below.

b. What is your total cost? Show your work.

c. How much money do you have left over?

Part 4: Gift Shop

You have decided to bring back souvenirs for your friends.

a. You purchased 12 keychains for $2 each and 8 erasable pens for $3 each. How much money did you spend in all? Show your work below.

b. A t-shirt costs $12.65. What types of bills and coins would you need to purchase the t-shirt with exact change? Draw the bills and coins below.

Week 3: **Pizzeria**

Part 1: Toppings: You are ordering pizza for your sibling's birthday party. You need 5 pizzas that have 8 slices each.

a) The first pizza will be half pepperoni and half plain slices. Each pepperoni slice has 7 pieces of pepperoni. How many pieces of pepperoni are there in all?

b) One fourth of the second pizza has sausage. How many slices of pizza have sausage?

c) One third of the last three pizzas have mushrooms. How many slices have mushrooms?

Part 2: Large Order: You are now ordering a large pizza order for the Lower School students at Friends Academy. There are 120 students in the Lower School. Each pizza serves 8 students.

a) How many pizzas will you need to order?

b) Each pizza pie costs $20.00. How much money will you spend?

Part 3: Pizza Slicing: You're now working at the pizzeria. Help slice each pizza into the correct amount of equal slices.

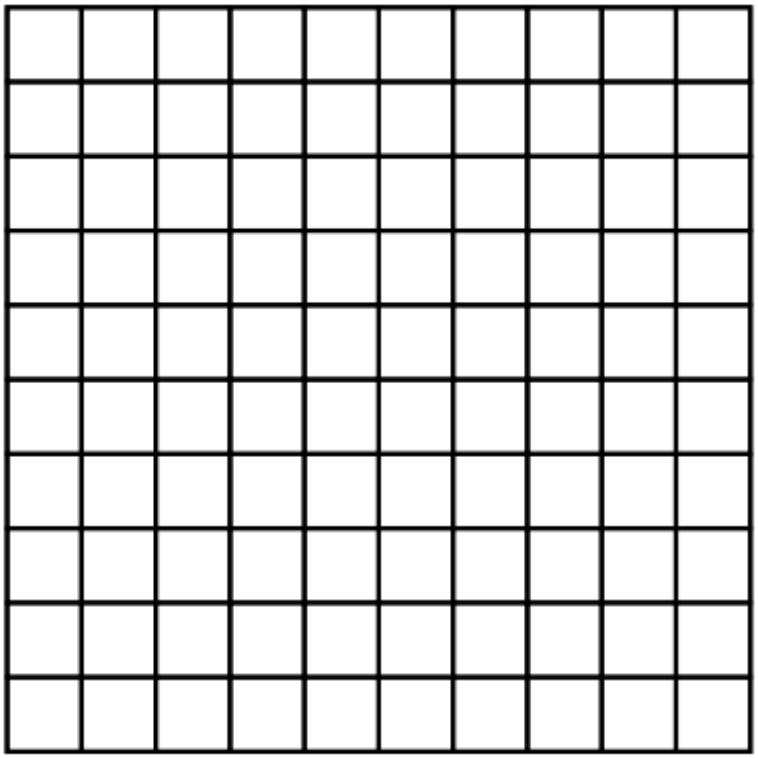
a) Cut the pizza into thirds.

b) Cut the pizza into fifths.

c) Cut the pizza into fourths.

d) Cut the pizza into eighths.

Part 4: Designing your Pizzeria: The pizzeria is 10 feet long by 10 feet wide.



a) What is the area of your pizzeria (in feet?)

b) Draw your cash register as a rectangle inside the pizzeria grid above.
   i) What is the area of your cash register (in feet)?

   ii) What is the perimeter of your cash register (in feet)?

c) Draw the oven inside the pizzeria grid above.
   i) What is the area of the oven (in feet?)

   ii) What is the perimeter of the oven (in feet?)

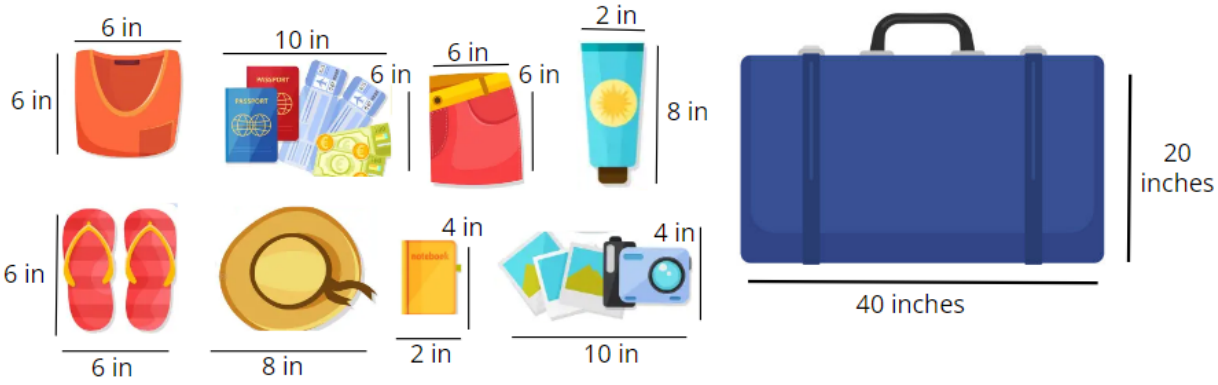
d) Draw any extra parts to your pizzeria (for example: chairs, tables, trash cans).

Week 4: **Vacation**

Part 1: Get Packing

The biggest part of a vacation is the preparation! You need to make sure you can pack everything you need for your island journey.

Your suitcase is 40 inches wide and 20 inches tall.
How many of the items below will fit in your suitcase?



Part 2: Take Flight

Your family's flight boards at 1:15 PM on Tuesday at JFK International Airport. You need to leave for the airport at 9:30 AM.

a. If you want 9 hours of sleep and need to be up by 7:30 AM on Tuesday, what time do you need to go to sleep Monday night?

b. At what time will you arrive at the airport if it is 54 minutes from your house?

c. You entered airport security at 10:36 and exited at 10:41. At what time will the rest of your family of five get through security one at a time?

d. Your family ate lunch and still have 35 minutes to spare before boarding the flight. What time is it?

Part 3: The Beach

As your family takes walks along the shore, you count seashells in patterns to add quickly.

a. On the first day at the beach, you count seashells in groups of 4. At your eighth group, how many seashells did you count in all?

b. On the second day at the beach, you notice the seashells are ordered in a pattern of a yellow, orange, then white shell. What color will the 50th seashell be?

c. Between each sand dune, you count five groups of 5 seashells. How many dunes do you pass if you count 60 seashells?

Part 4: Island Hunt

Before the trip ends, you and your siblings decide to explore the island for the famous hidden treasure chest! Each square on the grid is 100 square feet, with lengths of 10 feet by 10 feet. You start at the red location pin.

a. Color a path on the grid that you would take to get from the red location pin to the blue location pin. Each square is 10 feet by 10 feet. Walking on land only, what distance is your path?

b. Once you get to the blue pin, you find clear directions to the treasure! Describe in navigation the path you must take to find the treasure. *For example, "first go 400 feet northeast, second go 100 feet south..."*

c. The key describes that each color you see on the map represents either the forest, water, or the mountains. Choose one of the three elements of the island and find its total distance (or area) on the island. *Repeat with the other two elements. How much is the total area of the island?*

Additional Suggestions:

Think [Math]odology: https://www.mathodology.com/MathSplashSeries
Workbooks for Grades 1-5 available on Amazon

Reflex Math: https://www.reflexmath.com/
Create a login for reinforcement of selected topics

IXL: https://www.ixl.com/
Go to Learning > Math > Skills > Choose your Grade

Multiplication Facts Template (attached to bottom of this packet)

Create Multiplication & Division Flash Cards!

Multiplication Chart

ONE	TWO	THREE	FOUR	FIVE	SIX
1 x 1 =	2 x 1 =	3 x 1 =	4 x 1 =	5 x 1 =	6 x 1 =
1 x 2 =	2 x 2 =	3 x 2 =	4 x 2 =	5 x 2 =	6 x 2 =
1 x 3 =	2 x 3 =	3 x 3 =	4 x 3 =	5 x 3 =	6 x 3 =
1 x 4 =	2 x 4 =	3 x 4 =	4 x 4 =	5 x 4 =	6 x 4 =
1 x 5 =	2 x 5 =	3 x 5 =	4 x 5 =	5 x 5 =	6 x 5 =
1 x 6 =	2 x 6 =	3 x 6 =	4 x 6 =	5 x 6 =	6 x 6 =
1 x 7 =	2 x 7 =	3 x 7 =	4 x 7 =	5 x 7 =	6 x 7 =
1 x 8 =	2 x 8 =	3 x 8 =	4 x 8 =	5 x 8 =	6 x 8 =
1 x 9 =	2 x 9 =	3 x 9 =	4 x 9 =	5 x 9 =	6 x 9 =
1 x 10 =	2 x 10 =	3 x 10 =	4 x 10 =	5 x 10 =	6 x 10 =
1 x 11 =	2 x 11 =	3 x 11 =	4 x 11 =	5 x 11 =	6 x 11 =
1 x 12 =	2 x 12 =	3 x 12 =	4 x 12 =	5 x 12 =	6 x 12 =

SEVEN	EIGHT	NINE	TEN	ELEVEN	TWELVE
7 x 1 =	8 x 1 =	9 x 1 =	10 x 1 =	11 x 1 =	12 x 1 =
7 x 2 =	8 x 2 =	9 x 2 =	10 x 2 =	11 x 2 =	12 x 2 =
7 x 3 =	8 x 3 =	9 x 3 =	10 x 3 =	11 x 3 =	12 x 3 =
7 x 4 =	8 x 4 =	9 x 4 =	10 x 4 =	11 x 4 =	12 x 4 =
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7 x 11 =	8 x 11 =	9 x 11 =	10 x 11 =	11 x 11 =	12 x 11 =
7 x 12 =	8 x 12 =	9 x 12 =	10 x 12 =	11 x 12 =	12 x 12 =