Math Challenge #4

First Name: _____	Last Name: _____	Grade: _____
Teacher: _____	Parent's email: _____	

Grocery Shopping

Welcome to the Math Challenge #4. Mathematics is part of everyday life, especially when it comes to shopping. This math challenge is all about problems involving groceries, budgeting, and shopping in general. Grocery shopping requires a broad range of math knowledge from multiplication to estimation and percentages. Each time you weigh produce, calculate the price per unit, figure percentage discounts, and estimate the final price, you're using math in your shopping experience. Let's solve these real-life math problems. Get your parents and family members to work on these problems too.

The 2020 Math Challenge Tournament Registration is now open. Students in grade 2-6 are invited to take up on the challenge. This year the MCT will be ONLINE.
To learn more about it, visit https://www.mathinaction.org/math-challenge-tournament.html.

Fruits on Sale

Kinder & First Grade: solve at least 3 problems.
Second & Third Grade: solve at least 7 problems.
Fourth Grade and above: solve at least 12 problems.

75¢   35¢ $1.65 $3.95   55¢   95¢ $3.25

Use the above information to solve question number 1 to 9.   *Answer*

1.	Timothy bought 2 oranges, two kiwis and a papaya. How many pieces of fruit did Timothy buy?	
2.	Lisa bought two pieces of each type of fruits that are on sale. How many pieces of fruit did she buy in total?	
3.	Tina has only one dollar. She wants to buy one piece of fruit. How many fruits that cost less than $1?	
4.	With her $1, Tina realizes that she can buy two different fruits. What are they?	
5.	Anita bought 2 piece of fruit from the store. It cost her $1.30. Which two items could she have bought? List the two possibilities.	
6.	What is the largest number of different fruits can you buy with a $5 bill?	

7.	The Danson family (Mom, Dad, Tim and Sarah) each picked a fruit to buy from the store. The family bought bananas, oranges, peaches and papayas. • Mom did not get the cheapest fruit. • Dad loves fruits that are juicy. • Tim likes the one that cost about a dollar. • Everyday, Sarah brings one of the fruits she picked to school. Find out who pick which fruit.	

8.	What is the largest number of fruits can you buy with a $5 bill?	

9.	Jeremy wishes to buy one peach for each day that he will take his lunch to work with him this week. He will work 5 days, but on one day, his sister is taking him to a restaurant for lunch. If his local grocer sells peaches for $0.95 each, how much will he spend on peaches for his lunches this week?	

$1.16/ lb.

$5.95/bag

39¢ each

95¢ each

$1.68/lb.

$0.66/ lb.

10.	Maria needs to buy 8 tomatoes for her special pasta sauce. How much cheaper if she is buying a bag of tomatoes as compared to buying individual tomatoes?	

11.	Rhea is buying a pound of carrots, a pound of broccoli, a pound of green beans, an onion, and 4 tomatoes to make a large pot of vegetable soup. How much will these vegetables cost?	

12.	Ayan is making a small batch of vegetable soup. He plans to use half a pound of each of the following: carrots, brocolli, green beans. He would use 2 tomatoes and a whole onion. How much will these ingredients cost?	

1 gallon

96 Fl Oz

$3.20/ 8 boxes
There are 8 – 6.75 fl oz

$5.12

$4.32

Use the above information to solve question number 13 and 14.

13.	For the student store, Sienna bought 6 packs of apple juice at $3.20 per pack. She sells each juice box at $0.75 each. If she sells all the juice boxes in one day, how much profit will she get from selling these apple juice? Hint: find out what profit is.	

14.	Mrs. Moore is shopping for apple juice and she compares two sizes of apple juice containers for her family. Which is a better buy, the 1-gallon juice or 96 Fl Oz juice? And why? 1 gallon = 128 fluid ounces	
15.	For a fundraising, the math club held a donut sale. All profits will go to the local charity. They bought 10 dozen of donuts at a discounted price of $5.55 per dozen. They plan to sell each donut after school at $1.50 apiece. If they sell 90% of the donuts, how much money will they donate to the local charity?	
16.	A store offers a 50% discount on a package of steak that is normally priced for $29. The sales tax is 7.25%. What does the package of steak cost, including tax?	
17.	You have a coupon worth $18 off the purchase of a new microwave. At the same time the microwave is offered with a discount of 15%, but no further discounts may be applied. What would be the full price of the microwave if you end up paying the same amount for each discount?	
18.	Last week, Mrs. Lanvin bought a package of paper towels on sale at 5.98. This week the same package of paper towels is no longer on sale and it is priced at $7.95. What was the discount rate in percent last week? Round your answer to the nearest hundredths.	

Solution is available on November 20, 2020 at www.mathinaction.org