SHOPPING SCENARIOS

Read each of the shopping scenarios below. Use your Math Market Ad to answer the questions.

CEREAL SNACKING

You buy two boxes of cereal.

How many servings do you have?

How much do the two boxes cost altogether?

What combination of bills and coins would you use to pay for your purchase?

If you eat one serving each day, how many days would your purchase last?

PIZZA PONDERINGS

You buy a box of pizza.

You have a coupon for $1.50 off the frozen pizza. How much is it now?

You hand the cashier a ten dollar bill. How much change does she give you?

Using the change you received, what can you buy from The Math Market?

FRUITS AND VEGGIES

You are making a fruit salad.

You buy a package of strawberries, bananas, and grapes. How much do you spend?

If you bought a pre-made fruit salad at the store, the price is $14.99. How much do you save by making your own?

When you get home, you realize you need one more package of strawberries and two more bunches of bananas. How much do you spend on those three items?

DINNER DOLLARS

Mom sends you to the store for dinner.

She asks you to buy chicken, broccoli, and macaroni and cheese. How much money do you need?

Mom gives you a $20 bill and asks you to buy dog food for Fido if you have enough. Do you? Explain.

DECISIONS, DECISIONS

Now it's your turn to decide what to buy! Read the scenarios below and answer the questions.

YOU PICK TWO

Pick two items that you want to buy from the Math Market.

Item	Cost

Total Cost:

If you ONLY use bills, what combination would you use to make sure you had enough?

How much change would you get when you pay with your bills?

YOU PICK FOUR

Pick four items that you want to buy from the Math Market.

| Item	Cost

Total Cost:

If you ONLY use bills, what combination would you use to make sure you had enough?

How much change would you get when you pay with your bills?

FRUIT FOR THE FAMILY

You need to buy fruit for your family for the entire week. There are 6 family members, and everyone needs one serving of fruit for the entire week (7 days). What combination of fruit would you buy to have enough? Make a table to display what you would buy. Be sure to list your total, how you pay, and the change you get back.

Fruit
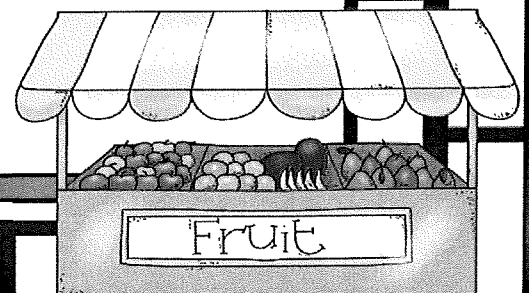
SHOPPING FOR THE WEEK

You go shopping twice throughout the week. Follow the directions below to detail both of your shopping trips. You must figure out what combination of items you can buy with each amount. Please buy enough to come within $2.00 of your starting amount, and include at LEAST three items.

MONDAY

You have $20.35 to go shopping with.
What do you buy?

How much money do you spend?

How much money do you have left?

How many servings of food did you buy?

THURSDAY

You have $14.53 to go shopping with.
What do you buy?

How much money do you spend?

How much money do you have left?

How many servings of food did you buy?

FOLLOW UP QUESTIONS

1. How much more money do you have to go shopping on Monday than you have on Thursday?

2. How much more money did you actually spend on Monday than on Thursday?

3. On Saturday, you decide to go shopping again. You can't decide whether you want to buy Donuts and Grapes or Cereal and Eggs. Which combination would be less expensive to buy? By how much?
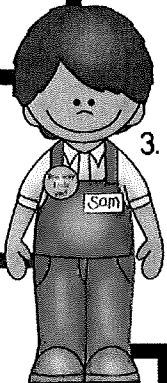
MORE PROBLEM SOLVING SCENARIOS

You need 15 servings of strawberries for your upcoming party. How many packages will you need to buy, and how much will it cost?

Your family uses 24 pieces of bread each week. How many loaves do you need, and how much will it cost?

Conditioner costs .59 more than shampoo. How much will it cost you to get both shampoo and conditioner?

Is it a better deal to make Chicken Strips and Broccoli for dinner or a pizza? Explain.

A singing music card costs $2.89 more than the card in the ad. How much would the singing card cost?

Mac & Cheese went on sale for $1.49. How much money would you save if you bought TWO boxes of it?

READING THE RECEIPTS

Each of the receipts below has some missing parts. Fill in the blanks to complete the receipts. Use your Math Market Ad to help you!

THE MATH MARKET

Carrots..................... $1.58
Cereal........................ $2.25
Crackers................. $2.04
Candy........................ $1.66
Card............................ $1.49

Coupon................... -$0.99

Total................. $_____

THE MATH MARKET

Bread.................... $_____
Eggs....................... $_____
Donut.................... $_____
Tissues...................$_____

Coupon................... -$_____

Total.......................... $7.90

Create your own receipt below. You buy at least 4 items and have a coupon for $1.59.

THE MATH MARKET

Grapes................... $_____
Strawberries........ $_____
Biscuits................. $_____
Dog Food................$_____
Shampoo................$_____
Bananas................$_____

Extras:
Bag of Ice..............$_____

Total.......................... $28.56

Pay here
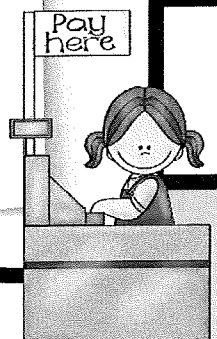
ESTIMATING SUMS & DIFFERENCES

PART 1

You go to the store with $20. Using front-end estimation (rounding to the nearest whole dollar), list three combinations of items that you may be able to buy. You can have any number of items, but it must be *about* $20.
Example: <u>Pizza ($7) + Dog Food ($13) = $20</u>

First Combination:

Second Combination:

Third Combination:

PART 2

Now, round the price of each item from Part 1 to the nearest TENTH of a dollar. Find the sum of those prices. Would you have gone over the $20 limit?
Example: <u>Pizza ($7.20) + Dog Food ($13.40) = $20.60</u> *Yes, I would have gone over the limit.*
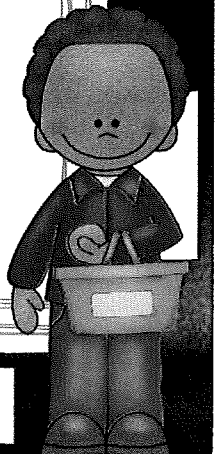
First Combination:

Second Combination:

Third Combination:

About how much more do eggs cost than whipped cream?

About how much would it cost to buy a card, tissues, and shampoo?

About how much would it cost to buy two bags of carrots?

About how much more is the pizza than the chicken strips?

ESTIMATING SUMS & DIFFERENCES
AT THE GROCERY STORE

| TOP 5 MOST-VISITED GROCERY STORES IN THE UNITED STATES	
GROCERY STORE	NUMBER OF VISITORS
Whole Foods	18,298,298
King Soopers	14,432,235
Costco	9,556,096
Safeway	9,456,022
Wal*Mart	6,873,234

About how many more visitors did Whole Foods have than Costco?

About how many visitors did Costco, Safeway, and Wal*Mart have combined?

Which grocery store has about ten million more visitors than Costco? Explain how you know.

Create two questions that can be answered using the table above with estimation or rounding.
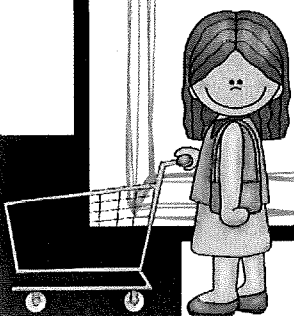
SALE, SALE, SALE!

Hot off the press! There is a sale at your local grocery store...but the managers are demanding YOU do the math!
There are two options for this stupendous sale: You can round the prices to the nearest whole dollar OR you round
them to the nearest tenth of a dollar. However, you must determine what the better deal is!
Use the prices from the Market Math Ad to determine the sale prices for each item if it was on sale by rounding to
the whole dollar AND rounding to the nearest tenth of a dollar. Then answer the questions on the next page.

Item	Whole Dollar	Tenth of a Dollar
Carrots		
Bananas		
Strawberries		
Grapes		
Eggs		
Chicken Strips		
Pizza		
Cereal		
Broccoli		
Crackers		
Mac & Cheese		
Whipped Cream		
Biscuits		
Candy		
Donuts		
Bread		
Tissues		
Shampoo		
Card		
Dog Food		

SALE, SALE, SALE!
Rounding Decimals Data Reflection

1. Which do you <u>think</u> will be the better buy, rounding to the nearest whole dollar or rounding to the nearest tenth of a dollar. <u>Why?</u>

2. How much will all of the groceries cost in total when you round them to the nearest whole dollar?

3. How much will all of the groceries cost when you round them to the nearest tenth of a dollar?

4. Which is the better deal? Was your prediction correct?

5. How much money do you save by rounding to the answer in number 4 than the other option?

6. What if the store manager gave you the option to round the prices to the nearest hundredth or thousandth of a dollar? Would you be interested in that sale? Why or why not?

7. Even if there weren't a sale like this at a real store, how could rounding to the nearest dollar or tenth of a dollar help you?

Extension
Add up the total price of the original items altogether. What is the total original cost of all of the items? How much money do you save by taking advantage of this sale?