**Consumer Math Mini Projects**

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Period\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**CLASSWORK INSTRUCTIONS**

1) There are 5 mini assignments that you may choose from for today’s activity. There are several recipes, and several shopping lists that you may complete.

2) You may choose which mini assignments you would like to do.

3) The activities are arranged in order of difficulty. Choose the activities that you believe are the best fit for you. If you are unsure which to pick, the teacher can choose for you.

4) You may not ask for help unless you have read the instructions and attempted to begin the work. All instructions are there for you already.

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| **Baking Apple Pie** |

You have volunteered to bake an apple pie for Sunday dinner this weekend. You went shopping at **Grocery Mart** to find all of the necessary items for baking the apple pie. Answer the questions below based on this information.

1) The ingredients you must purchase are in the chart below. Fill in their cost and add the cost of each item to find the total the amount for your grocery bill.

|  |  |
| --- | --- |
| **Item** | **Cost** |
| Flour |  |
| Sugar |  |
| Bag of Apples (2) |  |
| Brown Sugar |  |
| Milk |  |
| Whipped Cream |  |
| Vanilla |  |
| **TOTAL COST:** |  |

2) Your grandmother gave you $15 to cover some of the cost of the bill above. If you use that $15 to pay for some of the apple pie groceries, how much money of your own do you have to use? Show the work below.

3) After paying with your money and your grandmother’s money, your sister offers to split the cost of the grocery bill with you. How much would you each spend after splitting the cost of the bill? Show the work below.

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| **Salad Challenge** |

Your duty is to make a garden salad for your mother’s dinner party while she goes out to buy a cake. Follow the instructions on the charts below to find the best deal for ingredients.

1) Find the total cost of the ingredients below at **Grocery Mart**.

|  |  |
| --- | --- |
| **Item** | **Cost** |
| Head of Lettuce |  |
| Bag of Carrots |  |
| Onion (2) |  |
| **TOTAL:** |  |

2) Find the total cost of the ingredients below at **Shop and Go.**

|  |  |
| --- | --- |
| **Item** | **Cost** |
| Head of Lettuce |  |
| Bag of Carrots |  |
| Onion (2) |  |
| **TOTAL:** |  |

3) Which store had better deal on the salad ingredients? How much would you save between the two stores if you shopped at the store with the better deal?

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| **Random Run-Around** |

The team of chefs at the restaurant you work at are not very good at planning ahead. They forgot to buy several items for the weekend rush, and have sent you on the job to pick up the items they are missing. They want you to spend the **least** amount of money possible, even if it means going to **every grocery store** in town. Given those instructions, find the answers to the problems below.

1) The items the chefs are missing are in the chart below. Find the lowest cost of the item, write it in, and tell which grocery store you found it at. Find the total cost of the grocery run.

|  |  |  |
| --- | --- | --- |
| **Item** | **Cost** | **Grocery Store** |
| Milk |  |  |
| Coffee |  |  |
| Bag of apples |  |  |
| Ham |  |  |
| 24 bread rolls |  |  |
| Vanilla |  |  |
| **TOTAL COST:** |  |  |

2) Where did you purchase most of the groceries? What was your total bill at each individual place you shopped at? Show this by making a chart on your own below for each store you went to.

3) What is the least costly item you could purchase from any of the grocery stores? Where is it the cheapest?

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| **Breakfast Trial** |

After having your birthday party, your guests wake up and it’s time to cook an awesome homemade breakfast. You want to make pancakes for your friends, and you have to find out how much money to take with you to the store. Follow the instructions below for the breakfast shopping.

1) What is the average cost of corn flakes?

(Hint: an average is the cost of all items, divided by the number of items.)

2) Which store has the best price on cream cheese?

3) Even though cream cheese is not the cheapest at Sam’s Market, your best friend gets an employee discount there. Her discount is 5%. Is the cream cheese cheaper here, with her discount, or should you still shop at Peterson’s Groceries? Why?

4) You need 4 pounds of coffee for your friends (they love coffee). What is the average price of coffee between all five grocery stores?

5) Complete the shopping list below and find the total cost from Food Mart.

|  |  |
| --- | --- |
| **Item** | **Cost** |
| Dozen eggs |  |
| Orange juice |  |
| Milk |  |
| **Total:** |  |

|  |
| --- |
| **Twenty Dollar Challenge** |

You have entered to be a contestant on the Food Network television show “Twenty Dollar Challenge.” The show is designed to show how smart and thrifty you can be while shopping, and also test your math skills to win a prize. The food you buy on the show is donated to the local food bank.

You are given a twenty-dollar bill and a personal taxi by the show host, and your job is to go from store to store to purchase as many items as possible with the twenty dollars. **You cannot buy more than type of each food item, and you must plan a menu with the items you purchase.**

The winner is based on the types of items you buy, how much money you use, and how well you’ve thought out your shopping. Show your shopping list below, tell what items are from which stores, your total costs, and your menu. Be creative! Name the dishes you make. Good luck!

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Food Item | Grocery Mart | Sam’s Market | Shop and Go | Food Mart | Peterson’s Groceries |
| Ham | $20.30 | $21.00 | $17.50 | $18.40 | $17.10 |
| Canned Green Beans | $.85 | $.79 | $.49 | $.35 | $.32 |
| Bag of sweet potatoes | $3.00 | $3.25 | $2.95 | $3.10 | $2.95 |
| Canned pumpkin | $.99 | $1.29 | $.99 | $.89 | $.74 |
| 24 bread rolls | $3.59 | $3.99 | $2.89 | $2.90 | $2.65 |
| Canned corn | $.85 | $.79 | $.49 | $.35 | $.32 |
| Onion | $.79 | $.89 | $.59 | $.60 | $.40 |
| Flour | $.99 | $.99 | $.79 | $.89 | $.65 |
| Sugar | $.99 | $.99 | $.79 | $.89 | $.65 |
| Bag of apples | $3.99 | $3.99 | $2.99 | $2.59 | $1.99 |
| Brown Sugar | $.79 | $1.09 | $.89 | $.79 | $.68 |
| Marshmallows | $1.35 | $1.40 | $.99 | $.92 | $.95 |
| Whipped Cream | $1.09 | $1.30 | $1.10 | $1.05 | $1.10 |
| Bag of carrots | $1.59 | $1.79 | $1.50 | $1.48 | $.99 |
| Head of lettuce | $1.25 | $1.40 | $1.20 | $1.10 | $.89 |
| Milk | $2.19 | $2.35 | $1.99 | $1.99 | $1.70 |
| Orange Juice | $2.99 | $2.85 | $2.00 | $1.89 | $1.39 |
| 5 baking potatoes (3.9 lbs) | $.99/lb | $.99/lb | $.76/lb | $.65/lb | $.59/lb |
| Cream Cheese | $1.29 | $1.20 | $1.15 | $1.10 | $.89 |
| Butter  | $2.95 | $3.05 | $2.80 | $2.50 | $2.50 |
| Dozen Eggs | $1.99 | $1.99 | $1.95 | $1.80 | $1.59 |
| Corn Flakes | $3.99 | $3.99 | $3.89 | $3.76 | $1.99 |
| Shredded Cheese | $3.05 | $2.99 | $2.15 | $2.79 | $1.89 |
| Coffee (4 lbs.) | $7.99/lb | $8.79/lb | $6.99/lb | $6.88/lb | $5.99/lb |
| Vegetable Oil | $2.10 | $2.05 | $1.99 | $1.79 | $1.65 |
| Bread Crumbs | $3.65 | $3.05 | $2.75 | $2.60 | $2.35 |
| Vanilla | $3.10 | $3.65 | $3.20 | $3.45 | $2.99 |
| Pecans  | $4.95 | $5.15 | $4.90 | $4.52 | $3.10 |
| Sour Cream | $1.59 | $1.75 | $1.19 | $1.20 | $1.09 |

**GROCERY SHOPPING CHART**