

## Grocery Store Spreadsheet Lesson Plan

<b>Title:</b> Grocery Store Spreadsheet		<b>Grade Range:</b> 4-5
<b>Integrated Curriculum Area:</b> Math	<b>Concepts and Competencies:</b> Formulas, Money, Data Tables	<b>Tool:</b> Spreadsheet Software
<b>Summary:</b> Students will use a spreadsheet to calculate how many of certain items to buy in order to maintain a budget.		

### Materials

- Grocery ads

### Warm-up

- Make sure students have completed the EasyTech lesson **Formulas in Spreadsheets: Multiplying and Dividing** and its prerequisites.
- Read Amelia Works it Out to the class.
- Students find grocery ads listing prices for six items and bring them to class.
- Discuss shopping with a budget. What is a budget? Why is it useful to have a budget?
- Tell the students they have a budget of \$50 to spend on the six items they chose from the ads. They need to get close to spending \$50, but not go over that amount.

### Activity

Students will use a spreadsheet to help them maintain a budget:

- Students complete the Activity Page by recording the items in the grocery list, completing the data table, and completing the paper spreadsheet.
- Review the skills learned in the assigned EasyTech lessons and the functionality of the specific spreadsheet application students will be using.
- Students enter the information from the paper spreadsheet into a spreadsheet program on the computer.
- Students use cell names in formulas to calculate the total money spent per item, and then use the sum tool to calculate the total money spent and total items purchased.

### Wrap-up

- Students print, share, and display their spreadsheets. Did they stay within their budget of \$50?
- Discuss other scenarios students could calculate by using formulas in spreadsheets (example: budgeting their allowance, etc.).

### Extension

- Set up a "Classroom Store." The students have a budget of play money, and can buy as many items as possible with their budgets. They keep track of what they buy in a data table, and then create a spreadsheet with the information.

Name \_\_\_\_\_

## Grocery Store Spreadsheet Activity Page

Find ads (with prices) for six grocery items that you would buy for your family. Make a grocery list below:



You have \$50 to spend. Figure out how many of each item on your list you can buy with \$50. You can buy more than one of each item, but make sure you buy *at least one* of each item. Write how many you will buy next to the item on your grocery list above.

Here is a model of a data table:

Item	Price	Amount
Lettuce	\$1.35	2
Bread	\$1.67	4
Cheese	\$4.98	3
Potatoes (lb.)	\$.89	14
Milk	\$2.37	2
Cereal	\$3.99	2

Create your own data table using the information from your grocery list and ads.


continued

Here is a model of a spreadsheet:

	A	B	C	D
1	<b>Item</b>	<b>Price</b>	<b>Amount</b>	<b>Total per Item</b>
2	Lettuce	\$1.35	2	=B2*C2
3	Bread	\$1.67	4	=B3*C3
4	Cheese	\$4.98	3	=B4*C4
5	Potatoes (lb.)	\$.89	14	=B5*C5
6	Milk	\$2.37	2	=B6*C6
7	Cereal	\$3.99	2	=B7*C7
8	<b>Totals:</b>			

Create your own spreadsheet using the information from your data table. In column "D" write the formulas (using cell names instead of actual numbers) you will use in the spreadsheet program to figure out the total per item.

	A	B	C	D
1				
2				
3				
4				
5				
6				
7				
8				

You are ready to enter the information from your paper spreadsheet into a spreadsheet program on the computer. (Don't forget the labels.)

Use cell names to calculate the total price per item.

Once you have completed the calculations for the entire "Total per Item" column, use the sum tool to figure the total amount of items sold (cell C8) and the total money spent (cell D8).

Did you spend \$50 or less? (circle one)    YES    NO

## Grocery Store Spreadsheet Model

Item	Price	Amount	Total per Item
Lettuce	\$ 1.35	2	\$ 2.70
Bread	\$ 1.67	4	\$ 6.68
Cheese	\$ 4.98	3	\$ 14.94
Potatoes (lb.)	\$ 0.89	14	\$ 12.46
Milk	\$ 2.37	2	\$ 4.74
Cereal	\$ 3.99	2	\$ 7.98
<b>Totals:</b>		27	\$ 49.50

## Grocery Store Spreadsheet Rubric

### Self Evaluation

#### Activity Page:

- \_\_\_\_\_ Items are listed in the provided grocery list
- \_\_\_\_\_ Price and amount of each item are listed next to the item in the grocery list
- \_\_\_\_\_ Data table contains labels
- \_\_\_\_\_ Data table contains the items, correct prices, and amounts for each item
- \_\_\_\_\_ Paper spreadsheet contains labels
- \_\_\_\_\_ Paper spreadsheet contains the items, correct prices, and amounts for each item
- \_\_\_\_\_ Budget is met (determined after calculating total in computer spreadsheet)

#### Spreadsheet:

- \_\_\_\_\_ Spreadsheet contains labels
- \_\_\_\_\_ Spreadsheets contains the correct prices and amounts for each item
- \_\_\_\_\_ Cell names used in formulas to calculate the total per item
- \_\_\_\_\_ "Sum" tool used to calculate the total items bought
- \_\_\_\_\_ "Sum" tool used to calculate the total money spent
- \_\_\_\_\_ Spreadsheet is formatted to look like the model

### Teacher Evaluation

#### Activity Page:

- \_\_\_\_\_ Items are listed in the provided grocery list
- \_\_\_\_\_ Price and amount of each item are listed next to the item in the grocery list
- \_\_\_\_\_ Data table contains labels
- \_\_\_\_\_ Data table contains the items, correct prices, and amounts for each item
- \_\_\_\_\_ Paper spreadsheet contains labels
- \_\_\_\_\_ Paper spreadsheet contains the items, correct prices, and amounts for each item
- \_\_\_\_\_ Budget is met (determined after calculating total in computer spreadsheet)

#### Spreadsheet:

- \_\_\_\_\_ Spreadsheet contains labels
- \_\_\_\_\_ Spreadsheets contains the correct prices and amounts for each item
- \_\_\_\_\_ Cell names used in formulas to calculate the total per item
- \_\_\_\_\_ "Sum" tool used to calculate the total items bought
- \_\_\_\_\_ "Sum" tool used to calculate the total money spent
- \_\_\_\_\_ Spreadsheet is formatted to look like the model

## **Grocery Store Spreadsheet Model**

Moss, Marissa. Amelia Works it Out. Middleton, WI: Pleasant Company Publications, 2000.

Amelia learns lessons about putting a good idea to work by using her skills and making money.