# Math at Work 

## Consumer Economics

## A Simulation of a Person's Job Situation that Develops Student Skills and Knowledge

## CHOICE SHEET 1: JOBS

CCSS Math Practice Standard 1. Make sense of problems and solve them persistently.
Use the newspaper to find a job you'd like. List five different jobs you want to have.

1. Which job pays the most money per week?
2. Which job pays the least money per week?
3. Pick one job. Don't just choose the one that pays the most. Choose the one you would really like to do. What is it?
4. Why did you choose it?
5. How much money will you make each week if you work at that job?
\$
$\qquad$
6. There are 52 weeks in a year. How much money would you earn if you worked there for one year? To answer this question, what will you do?
$\qquad$ add __m multiply divide subtract

What is the answer? $\qquad$
7. What will you earn each month at that job?
A. How will you figure that out?
B. What is the answer? \$ $\qquad$

## CHOICE SHEET 2: NEW CLOTHES

CCSS Math Practice Standard 1. Make sense of problems and solve them persistently.

Pretend that you just finished high school. You want to buy some new clothes. You just got $\$ 100$ for a graduation present.

Use the Source Sheet: Clothes to find out prices of clothes.
Then finish this chart.
Do each line and figure out how much money you have left before you get to the next line. Stop when you can't buy any more.

| Clothes I Will Buy | Price | How Much Money <br> I Have Left |
| :--- | :--- | :--- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Surprise! There is a $50 \%$ sale at the clothing stores.
How much money do you have left now?
\$ $\qquad$
What else will you buy? Add that to the chart.

## CHOICE SHEET 3: LUNCH

CCSS Math Practice Standard 1. Make sense of problems and solve them persistently.
You have $\$ 10$ to go to your job. You need to pay for the bus fare (\$1 each way), and you want to eat lunch, too.

Here is the menu at the restaurant where you want to eat lunch.

| Soup | $\$ 1.50$ | French Fries | $\$ 0.75$ |
| :--- | :--- | :--- | :--- |
| Salad | $\$ 3.15$ | Pie | $\$ 1.00$ |
| Hamburger | $\$ 2.00$ | Milk | $\$ 0.85$ |
| Pizza | $\$ 3.50$ | Soft drink | $\$ 1.00$ |

Finish this chart. What do you buy at the restaurant.

| Food | Price |
| :--- | :--- |
|  |  |
|  |  |
| Total: | $\$$ |

How much does your total day at work cost you? $\qquad$
What if you made your own lunch? Look at the prices of food in the SOURCE SHEET for food. Make a list of things you could buy to make lunch for one week. Then figure out how much you could save by making your own lunch. If you don't find all the things you want to buy to make your own lunch on the source sheet, then check prices at the store or in the newspaper.

What I would buy for one week's lunches
Prices

How can you figure out what one day's lunch would cost?
What is that answer? \$ $\qquad$

## CHOICE SHEET 4: BUDGET

CCSS Math Practice Standard 1. Make sense of problems and solve them persistently.

You have a good job, and you earn $\$ 300$ a week. Make a budget for one week. Use this outline to do it. If you get to the bottom line and have spent too much money, go back and change some of the numbers. You live at home, so you do not pay rent.

| Budget Category | Cost | How Much Money I Have |
| :--- | :--- | :--- |
| Entertainment |  |  |
| Lunch |  |  |
| Haircuts |  |  |
| Clothes |  |  |
| Transportation |  |  |
| Books |  |  |
| Other Things: |  |  |
|  |  |  |

Surprise! You need to save $\$ 100$ a week to get ready to buy furniture when you move out of your home. If you need to, change your budget.

Another surprise! Your family decides you should pay $\$ 75$ a week to help pay for the costs of living there. Change your budget to add that weekly cost.

## CHOICE SHEET 5: BUDGET PROBLEM

CCSS Math Practice Standard 1. Make sense of problems and solve them persistently.

Bad news! You lose your wallet. You only have $\$ 100$ to pay for everything this week. Change your budget to you can get through the week.

| Budget Category | Cost | How Much Money I Have |
| :--- | :--- | :--- |
| Entertainment |  |  |
| Lunch |  |  |
| Haircuts |  |  |
| Clothes |  |  |
| Transportation |  |  |
| Books |  |  |
| \$75 Family Costs |  |  |
| Other Things: |  |  |

## CHOICE SHEET 6: YOUR OWN APARTMENT

CCSS Math Practice Standard 1. Make sense of problems and solve them persistently.

You decide to move out of your family's home. You have been saving money to buy furniture and dishes.

First, find an apartment to rent. Use the APARTMENT SOURCE SHEET to find apartments you can rent.

1. Find the most expensive apartment on that list.

How much does it cost to rent it each month? \$
Why is it more expensive than the other apartments?
2. Find the least expensive apartment on that list. How much less does it cost to rent that one than the most expensive one?

$$
\$
$$

3. Why does it cost so much less money to rent it?
4. You decide to get a roommate. Then you can share the costs. What would it cost each of you to rent the most expensive apartment on the list?
\$_
$\qquad$
What would it cost each of you to rent the least expensive apartment on the list?
\$_
$\qquad$
5. Which apartment do you choose to rent?

## Address:

$\qquad$
Reasons for choosing it:
7. How much money do you have left for the rest of your budget? \$ $\qquad$

## CHOICE SHEET 7: NEW FURNITURE

CCSS Math Practice Standard 1. Make sense of problems and solve them persistently.

You need to buy furniture for your apartment. Your roommate has a bed. There is no other furniture. Use the Source Sheet on Furniture Prices to find the prices of furniture. Look for prices in ads and stores, too.

You and your roommate have saved $\$ 800$ for furniture. Make a list of the things you buy.

FURNITURE IBUY PRICE HOW MUCH MONEY WE HAVE LEFT
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Surprise! There is a $20 \%$ sale at the furniture stores.
How much money do you have left now?
\$_
$\qquad$
What else will you buy? Add that to the chart.

## CHOICE SHEET 8: FOOD

CCSS Math Practice Standard 1. Make sense of problems and solve them persistently.

You and your roommate need to eat. You decide that each of you will pay half the cost of groceries each week. You want to pay $\$ 25$ each for the food each week.

How much will you spend on food each week? \$ $\qquad$
What will you buy? Use the FOOD SOURCE SHEET and ads to make a list of the foods you will buy. Remember, you need to eat every day.

Do each line and figure out how much money you have left before you get to the next line. Stop when you can't buy any more.

| Food We Buy | Price | How Much Money <br> We Have Left |
| :--- | :--- | :--- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

## PROBLEMS:

You don't have enough food, do you? How much money do you really need to spend for food each week? Finish the chart and add up the prices.

What is your weekly food budget? \$ $\qquad$
How can you afford to buy that food?

## CHOICE SHEET 9: THE EMPTY KITCHEN

CCSS Math Practice Standard 1. Make sense of problems and solve them persistently.
You and your roommate saved $\$ 150$ to buy dishes, pots, and pans. The kitchen in the apartment is empty. What do you need to buy? What can you afford? Use the DISHES SOURCE SHEET and ads to find the prices of what you need.

Then finish this chart.
Do each line and figure out how much money you have left before you get to the next line. Stop when you can't buy any more.

| Dishes We Buy | Price | How Much Money <br> We Have Left |
| :--- | :--- | :--- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Surprise! You get a $\$ 50$ birthday present. You decide to buy more dishes.
What else will you buy? Add that to the chart.
Bad News! You break the dishes. What will you do?

## CHOICE SHEET 10: APPLIANCES

CCSS Math Practice Standard 1. Make sense of problems and solve them persistently.
You and your roommate saved $\$ 600$ to buy appliances for the kitchen. The kitchen has an old stove in it and a refrigerator, but it doesn't work well. What do you buy?

What can you afford? Use the APPLIANCES SOURCE SHEET and ads to find the prices of what you need.

Then finish this chart.
Do each line and figure out how much money you have left before you get to the next line. Stop when you can't buy any more.

| Appliances We Buy | Price | How Much Money <br> We Have Left |
| :--- | :--- | :--- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Bad News! The stove overheats. The repair worker comes to fix it, but it is too damaged to be repaired. The Landlord says it is your fault and that you must replace the stove.

What will you do?

## CHOICE SHEET 11: BUYING A CAR

CCSS Math Practice Standard 1. Make sense of problems and solve them persistently.
You decide to buy a car. You look at your budget and decide that you can save money by

You look in the newspapers at the new and used car ads. (Check the SOURCE SHEETS.)

The most expensive car in the ads is the $\qquad$ .

It costs \$ $\qquad$ .

The least expensive car in the ads is the $\qquad$ .

It costs \$ $\qquad$ .

Choose any car from the ads that you think you can afford. You will be paying for it on a monthly basis.

Which car will you buy? $\qquad$
Why did you choose it?
How much does it cost? \$ $\qquad$

You go to the bank to get a car loan. They tell you how much you will have to pay each month if you take a 3-year loan. Each month you will repay \$ $\qquad$ of the money you borrowed from the bank.

You have to pay interest on the loan. That is like rent. The interest is 15\% Ask your teacher or your parents to explain interest payments to you. Then tell the total amount of money you will spend in three years to buy that car.

## CHOICE SHEET 12: A BETTER JOB

CCSS Math Practice Standard 1. Make sense of problems and solve them persistently.

You go to school while you are working to learn more job skills. Look in the JOBS SOURCE SHEETS for a job you want. Then figure out how to get it.

1. This is the job I want.
2. These are the kinds of things I would have to learn to do this job.
3. This is how long I think it would take me to learn those things in school.
4. This is how much money I would earn a year at that job: $\$$ $\qquad$
This is how much money I would earn a month at that job: \$ $\qquad$
This is how much money I would earn a week at that job: $\$$ $\qquad$
5. Set up a new budget. Tell how you would use the money you would earn at that new job.

## CHOICE SHEET 13: YOUR MONEY CHALLENGE

CCSS Math Practice Standard 1. Make sense of problems and solve them persistently.
Now it is your turn--make up a challenge for your class.

1. What is the kind of good or service that the buyer needs?
2. How much money does the buyer have?
3. What is the challenge? Write the directions here. Be sure to tell the other students:
$>$ how many things they need to buy
$>$ the prices of these things--they can use a source
sheet or you can make a list of prices
4. Extra Challenge: You can add another step here. For example, tell the students to figure out the price after there is a 2 -for-1 sale or a $20 \%$ reduction in price.

## PROJECT SHEET: PRICE CHALLENGE

CCSS Math Practice Standard 1. Make sense of problems and solve them persistently.

PRICE CHALLENGE--Make your own Math at Work Source Sheet. Use ads from stores to get prices. You can go to a store to find the prices, too.

| Kind of Product | Store 1 <br> Price | Store 2 <br> Price | Store 3 <br> Price |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

