

Los Angeles Times | IN EDUCATION

MATH YOU CAN BANK ON

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MATH YOU CAN BANK ON

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INTRODUCTION

Welcome to MATH YOU CAN BANK ON. This study unit is designed to introduce students to real-life financial and consumer skills. We hope you will find that these lessons and activities help students to bridge the gap between “textbook math” and the many ways that math can be applied in meaningful ways in everyday life.

Activities in this guide are not sequential and can be used in any order you feel is appropriate for your class. You may find that some activities can be on-going throughout the program. The lessons and activities can be easily modified to suit the special needs or economic circumstances of your students.

You will probably find that some teacher-led discussion and modeling is helpful for each activity. Then students can continue to work individually or in small groups to complete the lesson. Discussion and evaluation at the conclusion of each activity will help students to recognize some of the main ideas and concepts.

As a culmination of the unit, students are invited to design a personal plan for achieving both a short-term and long-term financial goal.

If your students are not familiar with The Times or The Times electronic edition, you may find it helpful to spend some time introducing them to the newspaper. You can help them to identify the different sections of the newspaper and the content that can be found in each.



MATH YOU CAN BANK ON was developed by Los Angeles Times in Education and is being provided to Southern California classrooms at no cost through generous donations from our subscribers. We hope that you find the program to be both exciting and relevant for your students.

LETTER TO THE PARENTS

Dear Parents,

Over the next ten weeks, our class will be participating in an exciting program called MATH YOU CAN BANK ON.

MATH YOU CAN BANK ON is a consumer education and math unit which provides students with the opportunity to apply their math and critical thinking skills to a subject which has meaning for them. Students will be introduced to some of the basic vocabulary of money and financial management, they'll learn how to keep and balance a checkbook, design a personal budget, find out how to comparison shop, and much more.

As part of this program, students will receive copies of The Times once a week and have access to The Times electronic edition. Content in the newspaper will help students to complete the study activities with up-to-the-minute material.

One of the added benefits of a real-world study unit like MATH YOU CAN BANK ON is that students will find their classroom learning has immediate applications in their life outside of school. So don't be surprised if your son or daughter has a new interest in budgeting, or if talk around the dinner table includes ideas for getting the most for your money at the supermarket. As a culmination of the program, students will identify personal long-term and short-term financial goals and outline a strategy for achieving them.

I encourage you to share the excitement and learning of the next few weeks with us. And I'd love to hear your comments and observations. As always, your interest and support are an important part of the educational process.

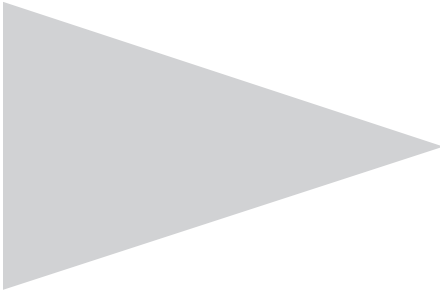
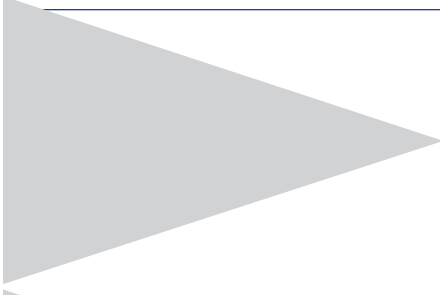
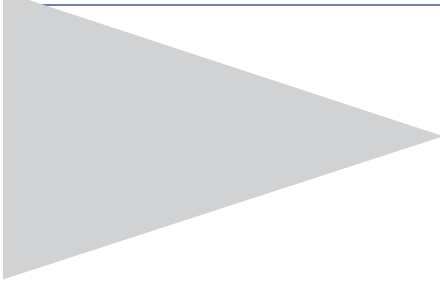
Sincerely,

Teacher

MONEY TALKS

Like many other areas of life, personal finances and consumer issues include some specialized vocabulary. Knowing the meaning of these specialized terms can help increase our understanding of the subject. As you complete MATH YOU CAN BANK ON activities, keep a list or card file of new words and phrases that you encounter. For each new word or phrase that you find:

- ✎ Write the word.
- ✎ Write the entire sentence that contains the word.
- ✎ Write the dictionary definition of the word. (If there are several definitions, choose the one that seems to match the meaning in the sentence where you found the word.)
- ✎ Then write a sentence of your own using the word. Try to express an idea about how this new term applies to you or your family. (There is a MATH YOU CAN BANK ON glossary printed in the Teacher's Guide. It may include some of the terms you encounter.)

	Word:	_____
	Context sentence:	_____
	Dictionary definition:	_____
	Your own sentence:	_____
<hr/>		
	Word:	_____
	Context sentence:	_____
	Dictionary definition:	_____
	Your own sentence:	_____
<hr/>		
	Word:	_____
	Context sentence:	_____
	Dictionary definition:	_____
	Your own sentence:	_____

MONEY TALKS

(Continued)

Word:

Context sentence:

Dictionary definition:

Your own sentence:

Word:

Context sentence:

Dictionary definition:

Your own sentence:

Word:

Context sentence:

Dictionary definition:

Your own sentence:

Word:

Context sentence:

Dictionary definition:

Your own sentence:

Word:

Context sentence:

Dictionary definition:

Your own sentence:

MONEY DOESN'T GROW ON TREES



You may have heard the expression “money doesn’t grow on trees.” People use this expression to mean that there is not an endless supply of money.

Money that individuals or households receive is called income. Income can be payment for work (usually called salary or wages), money received for selling goods or services, or money received as a gift. Interest earned on money in a savings account or other investment can also be used as income.

Think about where the money you receive comes from. Do you receive a regular allowance? Do you have a part-time job? Do you receive gifts from parents or relatives? Do you earn cash from recycling or other ventures?

Then make a list of your various sources of income.

MONEY DOESN'T GROW ON TREES

(Continued)

Now go through The Times or The Times electronic edition to find items related to the different kinds of personal and business income listed below. List the section and page number where you find each item.

1. An ad describing a savings account or investment which will provide the investor with interest income.
2. An ad placed by someone seeking to sell personal belongings.
3. An ad offering “collectibles” for sale or purchase.
4. An ad for a job which includes the salary or wages.
5. An ad describing a business opportunity.
6. An ad in which a business offers merchandise for sale.
7. An ad for a garage sale.
8. A news story which describes personal or business income.
9. A cartoon in which income is an issue.
10. A news story that deals with the income of a government official.



— EXTENSIONS —

Brainstorm with your classmates about ways students your age can make money. Discuss any savings or investment plans that students are involved in to help make their money “grow.”

Look at some of the jobs offered in the newspaper classified section. Evaluate which jobs offer the best salaries. Discuss choices students can make now to help give them the most earning power in the future.

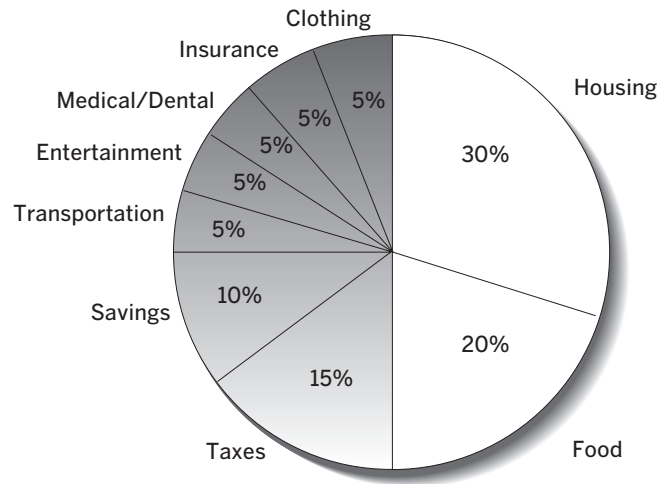
Research strategies used by companies that wish to increase their business income.

BUDGET BASICS

Planning a budget can be as simple as deciding how much money to spend on different types of expenses. Budgeting means to assign a certain percentage of your income to certain types of expenses on a weekly, monthly, or annual basis. In this lesson, you will create a monthly budget for a typical family. You will also create a personal budget that a student could follow.

A typical family might have the following types of expenses each month:

Housing	30%
Food	20%
Clothing	5%
Taxes	15%
Insurance	5%
Medical/Dental	5%
Entertainment	5%
Transportation	5%
Savings	10%



Look at the pie chart that shows the percentage of total income designated for housing. Below, calculate how much could be spent on housing for each of three different monthly incomes.

$$\begin{array}{r}
 \text{Fast-Food Manager} \\
 \$2,000 \text{ per month} \\
 \times .30 \\
 \hline
 = \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 \text{Teacher} \\
 \$4,000 \text{ per month} \\
 \times .30 \\
 \hline
 = \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 \text{Engineer} \\
 \$6,000 \text{ per month} \\
 \times .30 \\
 \hline
 = \\
 \hline
 \end{array}$$

Now use the classified section of The Times or The Times electronic edition to find housing that does not exceed each family's planned budget. In the spaces below, glue an advertisement for an apartment or house that is within the budget of each family.

BUDGET BASICS

(Continued)

Look for a job advertisement in The Times or The Times electronic edition that includes the starting salary. If the salary listed is yearly, divide it by 12 to arrive at a monthly amount. If the salary is given as an hourly rate, multiply by 175. If the salary listed is monthly, you are ready to start.







Fill in the job title and monthly salary in the spaces below:

JOB:
MONTHLY SALARY:

Now fill in the amounts for each of the following monthly budget items. Note that 15% of this budget consists of discretionary items — you should fill in percentages that add up to 15% for the last three items below.

Housing	30 x salary =	_____
Food20 x salary =	_____
Clothing05 x salary =	_____
Taxes15 x salary =	_____
Insurance05 x salary =	_____
Medical/Dental05 x salary =	_____
Transportation05 x salary =	_____
Entertainment	_____ salary =	_____
Savings	_____ salary =	_____
_____ (other)	_____ salary =	_____

Now look through The Times or The Times electronic edition to find items in the different budget categories above that stay within the amount budgeted. Discuss the following issues with a partner or group:

-  Does the monthly income the family budgeted above meet the family's needs?
-  Is there additional money for extras like vacations or gifts?
-  What would happen if the family car broke down?
-  How might the budget change if there were a major illness in the family?
-  Why might single-parent families have to budget more carefully?
-  Do you consider your own family's budget when you ask for an allowance or an expensive item?

BUDGET BASICS

Personal Budget Worksheet

Students usually have an allowance or income of some kind. A student's expenses will be different from a family's expenses. Listed below are some expenses you might have. Write a percentage amount for each one, including any items you add to the list. Remember, the total of all the percentages cannot exceed 100% — or you will be spending money that you don't have. Fill in your allowance or other income, then calculate how much you should be spending on each item to stay within your budget.

INCOME \$ _____

EXPENSES	PERCENTAGE	AMOUNT
CLOTHING <i>(daily and special occasion)</i>	_____ %	\$ _____
ENTERTAINMENT <i>(food, movies, video games, dates, etc.)</i>	_____ %	\$ _____
TRANSPORTATION <i>(bike, bus, gas, insurance, etc.)</i>	_____ %	\$ _____
GIFTS <i>(family, friends, etc.)</i>	_____ %	\$ _____
SAVINGS <i>(for college, car, etc.)</i>	_____ %	\$ _____
HOBBIES <i>(sports, collections, etc.)</i>	_____ %	\$ _____
SCHOOL SUPPLIES	_____ %	\$ _____
OTHER	_____ %	\$ _____

Now look through The Times or The Times electronic edition to find some items that will fit in your budget. If using the electronic edition, students will need to print out pages with ads. Glue the ads below.

Consider the following with a classmate or group:

- 1** Can you stay within your budget?
- 2** Can you find any free entertainment ideas in the newspaper?
- 3** Why is saving an important part of your budget?

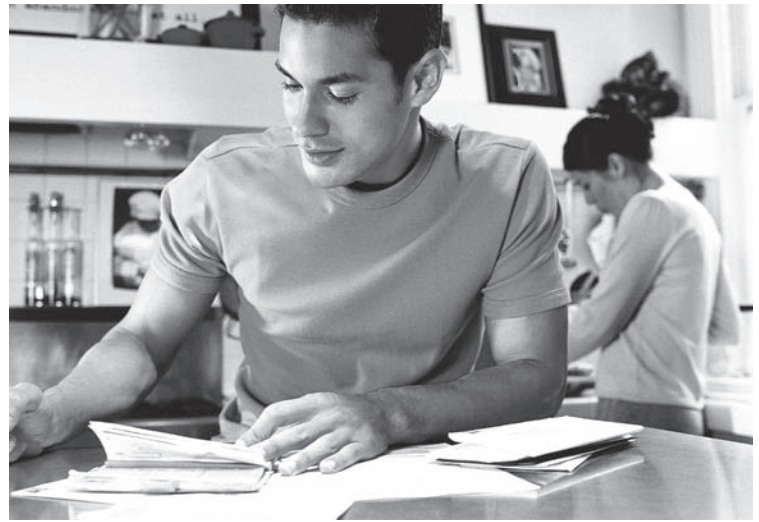
— EXTENSIONS —

Have a contest to find the cheapest, but most exciting, date or family outing using ideas found in The Times or The Times electronic edition.

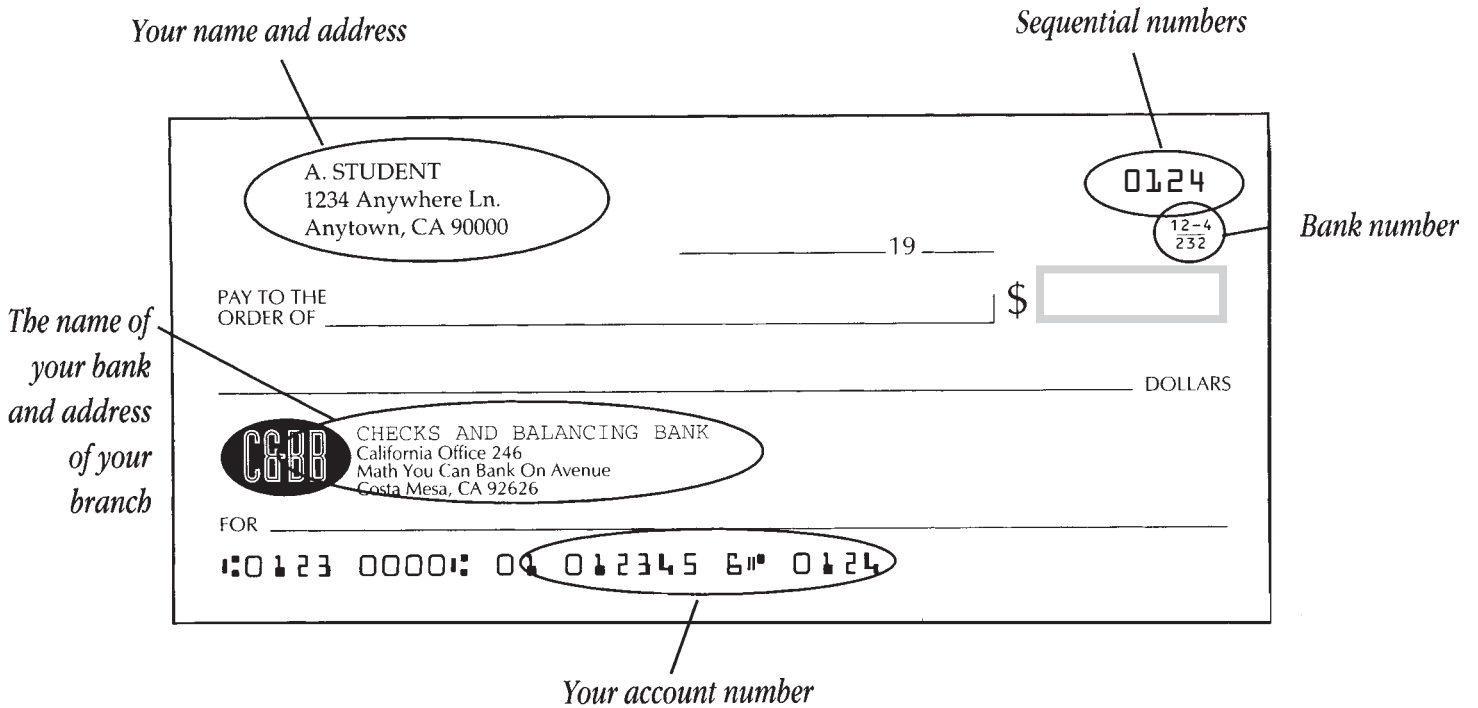
CHECKS & BALANCING

Most people find it advantageous to have a personal checking account as a safe and convenient place to keep the money they will use to pay bills and other day-to-day expenses. Paying by check also allows people to keep track of monthly expenditures.

A check is an “order” from you to your bank. When you sign a check, you authorize your bank to pay money from your checking account to the person or business you have designated on the check (the “payee”).










BELOW IS A DIAGRAM OF A PERSONAL CHECK:




HOW TO WRITE A CHECK

When you write a check, you fill in the blanks on the front of the check and then sign it. Checks should always be written in ink. It's also important not to cross out or change information on a check. If you make a mistake while writing a check, write "VOID" across the front of the check, tear it up, and throw it away. Record "VOID" and the check number in your checkbook register. Then start over and write a new check.

A check contains the following information:


-  **DATE:** the month, day, and year when you write the check.
-  **PAYEE:** the person or company you want to pay with the check. You can also use a check to withdraw cash from your checking account for your own use by writing your own name here. Write the payee's name as close to left edge of the space as possible and draw a line after the name so that no other names can be written in the space.
-  **AMOUNT IN NUMBERS:** Print the first number as close to the dollar sign as possible to prevent anyone from adding another number later.
-  **AMOUNT IN WORDS:** Again, to prevent anyone from altering or adding to your entry, begin writing as far to the left as possible and draw a line through any space you leave blank. Write the cents amount as a fraction. Banks check to see if the amount in numbers and the amount in words are the same. If they are different, the bank will most likely pay the amount in words.
-  **SIGNATURE:** You should sign your name the same way each time you write a check and the signature should match the one on file at the bank where you opened the account. Never sign a check before you've filled in the date, payee, and amount. This is called a "blank check" and could be filled in and cashed by anyone.
-  **MEMO:** You can use this space to write a note about the purpose of the check or to write the account number of the bill you are paying with the check.
-  **BANK CODE NUMBERS:** Don't write anything in this area. These numbers help your bank process the check quickly and accurately.


After you've written a check, record the check number, date, amount, and payee in your check register.

A. STUDENT 1234 Anywhere Ln. Anytown, CA 90000	0124 12-4 232
PAY TO THE ORDER OF <u>Joe's Shoe Emporium</u>	\$ 15 ⁷⁸/₁₀₀
<u>Fifteen and 78/100</u> DOLLARS	
 CHECKS AND BALANCING BANK California Office 246 Math You Can Bank On Avenue Costa Mesa, CA 92626	FOR <u>tennis shoes</u> <u>A Student</u>
⑆0123 0000⑆ 01 012345 6⑆ 0124	

SAMPLE CHECKS

Look through the pages of The Times or The Times electronic edition to shop for five gift items for people you know. Each gift must be purchased and paid for with a MATH YOU CAN BANK ON check. You have \$500 in your checking account. Fill out the five checks below to pay for your purchases, then record them in your checkbook register. Keep track of your balance so that you don't overdraw your checking account.

A. STUDENT 1234 Anywhere Ln. Anytown, CA 90000	0125
	12-4 232
PAY TO THE ORDER OF _____	\$ <input type="text"/>
	_____ DOLLARS
 CHECKS AND BALANCING BANK California Office 246 Math You Can Bank On Avenue Costa Mesa, CA 92626	
FOR _____	
⑆0123 0000⑆ 01 012345 6⑈ 0125	

A. STUDENT 1234 Anywhere Ln. Anytown, CA 90000	0126
	12-4 232
PAY TO THE ORDER OF _____	\$ <input type="text"/>
	_____ DOLLARS
 CHECKS AND BALANCING BANK California Office 246 Math You Can Bank On Avenue Costa Mesa, CA 92626	
FOR _____	
⑆0123 0000⑆ 01 012345 6⑈ 0126	

SAMPLE CHECKS

(Continued)


A. STUDENT
1234 Anywhere Ln.
Anytown, CA 90000

0127

12-4
232

PAY TO THE ORDER OF _____ \$

_____ DOLLARS

 CHECKS AND BALANCING BANK
California Office 246
Math You Can Bank On Avenue
Costa Mesa, CA 92626

FOR _____

⑆0123 0000⑆ 01 012345 6⑈ 0127


A. STUDENT
1234 Anywhere Ln.
Anytown, CA 90000

0128

12-4
232

PAY TO THE ORDER OF _____ \$

_____ DOLLARS

 CHECKS AND BALANCING BANK
California Office 246
Math You Can Bank On Avenue
Costa Mesa, CA 92626

FOR _____

⑆0123 0000⑆ 01 012345 6⑈ 0128


A. STUDENT
1234 Anywhere Ln.
Anytown, CA 90000

0129

12-4
232

PAY TO THE ORDER OF _____ \$

_____ DOLLARS

 CHECKS AND BALANCING BANK
California Office 246
Math You Can Bank On Avenue
Costa Mesa, CA 92626

FOR _____

⑆0123 0000⑆ 01 012345 6⑈ 0129

SAMPLE CHECKBOOK REGISTER

Record Transaction below: Checks, ATM Withdrawals, Transfers and Deposits

NUMBER	DATE	DESCRIPTION OF TRANSACTION	TAX ITEM (✓)	AMOUNT OF PAYMENT OR DEBIT (-)		✓	AMOUNT OF DEPOSIT OR CREDIT (+)		BALANCE FORWARD	

BALANCING A CHECKBOOK

Another part of managing your money is balancing your checkbook. This task is normally completed monthly when you receive your bank statement. Also referred to as “reconciling” your bank statement, balancing your checkbook consists of checking your records against those of your bank.

Balancing your checkbook is much easier if you have remembered to write down all of your checks, deposits, withdrawals, and bank charges in your checkbook register when they occurred and you have kept an accurate running balance.

Follow the steps below to balance your checkbook. The same steps may be printed on the back of your monthly bank statement.

1. In your checkbook register, check off the “checks paid” listed on your statement. The items not checked off are still “outstanding.”
2. Write down the balance from your checkbook register.
3. Subtract any service charges which appear on your bank statement that you have not yet entered in your checkbook register. The result is your new checkbook balance.
4. Write down the balance from your bank statement.
5. Add any recent deposits not yet recorded on your bank statement.
6. Subtract the amount of all outstanding checks — checks you have written which have not yet appeared on your bank statement.
7. The result is your new bank statement balance.

Your new checkbook balance from Step 3 should be the same as your new bank statement balance from Step 7. If the two numbers are not the same, double-check the math for your checkbook register entries and the calculations you made in the checkbook balancing process. Make sure you have accurately carried forward the balance from one page of your checkbook register to the next.

If things still don't balance, don't panic. The customer service department at your bank can help you. Some banks have 24-hour phone lines. And it does get easier with practice.



NEEDS & WANTS

Consumers use money to buy items that they need and want. Things that people *need* are items that are necessary for everyday life (such as water, food, clothing, etc.). Things that people *want* are items that may add comfort or happiness to our lives, but are things that we could live without. One part of setting spending priorities is to distinguish between *needs* and *wants*.

In personal budgeting, it's helpful to make a list of expenses, determine whether each expense on the list is a *need* or a *want*, and then prioritize the items that are *wants* to stay within the budget.

Imagine that you've just received your paycheck and are thinking about what to do with it. Below is a list of things you might do with your money. Put an "N" next to items that are *needs* and a "W" next to items that are *wants*. Then prioritize the *wants* by putting a "1" next to the item you want the most, a "2" next to the item that is the next most important, etc. Discuss your list of *wants* and *needs* with your classmates.

- _____ Pay the rent
- _____ Pay the electric bill
- _____ Get a new outfit for the party on Saturday
- _____ Do the grocery shopping
- _____ Buy a smoke detector
- _____ Get the car washed
- _____ Take your work clothes to the dry cleaner
- _____ Buy a new CD
- _____ Get new brakes for the car
- _____ Send flowers to your Aunt
- _____ Get concert tickets
- _____ Deposit money in your savings account
- _____ Pay the phone bill



Go through the pages of The Times or The Times electronic edition and look for ads which use *need* as part of their sales pitch to consumers. Do consumers really need each of these products?

Working with a partner, find five ads in the newspaper for products that are *needs*, then find five ads for products that are *wants*. Prioritize your *want* items. Discuss your findings with the class.

SHOPPING SMART

Comparison Shopping

One of the skills that helps consumers get the most for their money is comparison shopping. Comparison shopping can involve making several types of comparisons:

1. Comparing the price for the *same* item sold at several different places.
2. Comparing the cost of several similar products.
3. Using *unit pricing* to compare the cost of different sizes of the same product.

Comparing the price of the same item sold at several different places.

Stores will often lower the price of a number of items below their competitors' prices to entice shoppers to come to their store. Look at the grocery store ads the newspaper to find two examples of the same item sold for different prices in different stores.

ITEM:	
Store A:	Advertised Price:
Store B:	Advertised Price:
ITEM:	
Store A:	Advertised Price:
Store B:	Advertised Price:

Some stores use their “coupon policy” to make their prices lower than their competitors' prices. Find the “coupon policy” for three different supermarkets that advertise in the newspaper and record this information on the chart below.

	STORE 1	STORE 2	STORE 3
NAME OF STORE			
ACCEPTS MANUFACTURERS' COUPONS AT FACE VALUE			
ACCEPTS COMPETITORS' COUPONS AT FACE VALUE			
WILL DOUBLE ALL COUPONS			
WILL DOUBLE SOME COUPONS			
WILL NOT ACCEPT COUPONS			
OTHER			



SHOPPING SMART

Comparing the price of several similar products.

Comparing similar products is another strategy for saving money. Often, two different products can substitute for one another even though they are not exactly the same. In the grocery store, this can also mean comparing several brand names and/or comparing a brand name product to a generic product.

One consideration with this type of comparison shopping is the real or perceived quality of the item you purchase. For instance, it may not matter a great deal to kids what brand of laundry soap they use — but the brand name of athletic shoes or jeans they purchase may be very important to them. The goal in this case is not just to find the least expensive item, but to find the best value for the best price.

*Set up a class competition to go through the ads in *The Times* or *The Times* electronic edition to “purchase” the most stylish school outfit for the best price. Work in teams of two or three students. Compare the items selected by each team.*

Using unit pricing to compare the cost of different sizes of the same product.

Another way to shop smart is to compare the unit price of the items you buy. The unit price will depend on the type of item you are purchasing. For instance, you might compare the cost per ounce of two different brands of catsup or the cost per 100 paper napkins. Unit pricing can also help you compare the large-size containers and multi-packs offered at discount membership stores with the conventional sizes and quantities offered at your regular supermarket.

Here are two examples of how to use unit pricing:

1. Which is a better value, a 24 oz. bottle of dishwashing liquid for \$1.89 or a 32 oz. bottle for \$2.39? Use unit pricing to help you decide. Determine the cost per ounce for each size bottle by dividing the price by the number of ounces.

$\$1.89$ divided by 24 oz. = 8 cents per ounce

$\$2.39$ divided by 32 oz. = 7 cents per ounce

So in this case the larger size, the 32 ounce bottle, is a better buy.

2. Which is a better value, a six-pack of soft drinks for \$1.29 or a twelve-pack for \$2.89? Use unit pricing to help you decide. Determine the cost per can of soda by dividing the price by the number of cans.

$\$1.29$ divided by 6 cans = 22 cents per can

$\$2.89$ divided by 12 cans = 24 cents per can

So in this case the smaller size, the six-pack of soda, is a better buy.



SHOPPING SMART

Unit Pricing (Continued)

Look through the grocery store ads in The Times or The Times electronic edition. Find three examples of ads for different sizes or quantities of the same product. List the sizes and prices on the chart below. Then calculate the unit price to determine which is the better value.

EXAMPLE 1				
Item A	\$ _____	Price	÷	Quantity _____ = Unit Price _____
Item B	\$ _____	Price	÷	Quantity _____ = Unit Price _____
The best buy is _____				

EXAMPLE 2				
Item A	\$ _____	Price	÷	Quantity _____ = Unit Price _____
Item B	\$ _____	Price	÷	Quantity _____ = Unit Price _____
The best buy is _____				

EXAMPLE 3				
Item A	\$ _____	Price	÷	Quantity _____ = Unit Price _____
Item B	\$ _____	Price	÷	Quantity _____ = Unit Price _____
The best buy is _____				

The concept of unit pricing can also be used to convince consumers to purchase more than they really need. For instance, you need one pair of gloves but when you go to the store you discover that you can buy one pair for \$15 or two pairs for \$25. You might be tempted to buy two pairs, because the unit price for two pairs is only \$12.50 per pair. But if you really only need one pair, you would be spending an extra \$10 for a second pair of gloves you don't really need.

Go through today's Times or The Times electronic edition to locate an ad which uses unit pricing to encourage consumers to buy more of something than they might really need. Discuss ways to make this kind of pricing work to your advantage.

SHOPPING SMART

Shopping Sales

Buying items that are “on sale” can help your money go further. When you can purchase an item for 20% to 40% off the regular price, the amount you save can be significant.

Find two examples in today’s Times or The Times electronic edition of items offered at a special sale price. List each item below, show the regular price, then calculate how much money you would save by buying the item on sale.

ITEM #1:

REGULAR PRICE: _____ SALE PRICE: _____

SAVINGS: _____

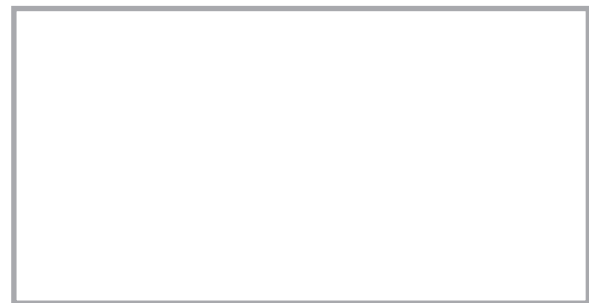
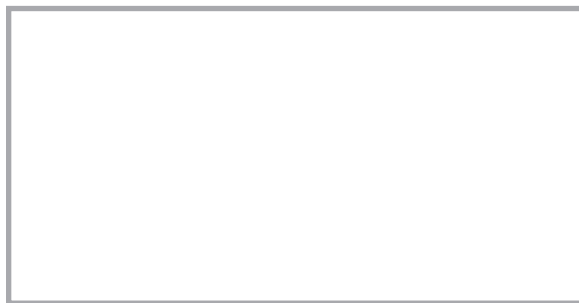
ITEM #2:

REGULAR PRICE: _____ SALE PRICE: _____

SAVINGS: _____



Of course, sales can also tempt consumers to spend more than they originally planned. And the added pressure of a “limited-time offer” or a “48-hour sale” can encourage shoppers to make quick decisions, rather than thoughtfully plan their purchases. Find two examples of this kind of sale in today’s Times or The Times electronic edition.



— EXTENSIONS —

There are some predictable sales patterns which can help consumers get the lowest prices for needed items. For example, the end of the summer is usually a good time to get the best price on air conditioners, barbecues, and patio furniture. Conduct research to find some other predictable sales patterns. Compare your findings with those of your classmates.

Put together a “Shopping Smart” guide for students your age to save money on the items they purchase the most. Include clothing, entertainment, hobbies, and snack food. Interview your friends to discover their best ideas for getting great bargains.

MAKING MONEY GROW

Imagine that you just received \$1,000 from a distant relative to invest for your future education. How would you invest this money? Look through the Business section of The Times or The Times electronic edition to find examples of the following different kinds of investments.

INVESTMENT TYPE	EXAMPLE	YIELD
6-month certificate of deposit		
1-year certificate of deposit		
5-year certificate of deposit		
Stock mutual fund		
U.S. Treasury bond		
Individual stock		
Other		

— EXTENSIONS —

- ☛ Which of these investments have the highest risk? Which are the safest?
- ☛ How much time (in years) will you have to invest before you enter college?
- ☛ Where will you invest your \$1,000? Write a paragraph explaining your choice. Remember to consider the amount of risk, the yield, and the length of time you have to invest.
- ☛ Calculate your earnings for the first year. $\$1,000 * \text{_____ (yield)} = \text{first year earnings}$. How would you reinvest for a second year? Based on the number of years you have to invest before college, how much money will you have if you keep all your principal and interest in this investment until then?



THE BIG PICTURE

The financial condition of individuals and businesses can be affected by many different events and conditions in the world around us. For instance, a drought in California may cause produce prices to rise which, in turn, could lead to higher grocery bills for consumers. Or a new tax law enacted by the state legislature or Congress can alter individuals' spendable income. These "big picture" events can pose challenges or present opportunities.

Follow the news in The Times or The Times electronic edition and keep a file of items that could have an impact on your personal or family finances. For each news item you find, think about actions you could take to minimize negative effects or maximize benefits.

NEWS EVENT: _____
IMPACT: _____
ACTIONS: _____
NEWS EVENT: _____
IMPACT: _____
ACTIONS: _____
NEWS EVENT: _____
IMPACT: _____
ACTIONS: _____
NEWS EVENT: _____
IMPACT: _____
ACTIONS: _____

MONEY ON WHEELS

One of the largest expenditures an individual or family makes is the purchase of an automobile. Although we each have different fantasies about our “dream car,” there are some important realities to consider. The following activity will consider some of the factors in choosing a car that will meet basic needs and fit into a budget.

Find the automobile ads in the newspaper classified section. The used cars are listed by make in alphabetical order. This section also includes large advertisements for new cars.

Choose a car that would meet your needs or those of your family. Think about what kind of room you need, the amount and type of driving you will be doing, and other items that are important to you such as air conditioning, air bags, four doors or two, etc.

If you don't have enough money to pay cash for a car, you may wish to borrow the money from a bank or other financial institution. This is referred to as financing your purchase. Financing allows you to spread the cost of a car over several years. Your monthly payment will include interest on the amount borrowed, or financed, which you pay to the bank. The interest rate can be a set percentage or a variable rate. The actual dollar amount of interest will be determined by the amount borrowed and the term of the loan, usually from two to five years.

Select a car that might be realistic for you or your family. Think about whether this will be a cash purchase or whether you will need to finance the car. How much money will you need for the down payment and monthly payments? The following exercise should help you decide. It will also show the actual cost for a car that is financed over four years.



MONEY ON WHEELS

(Continued)

GLUE THE AD FOR THE CAR YOU SELECTED HERE.



1. Price of car:\$ _____
2. Sales tax:\$ _____
3. Full cash price of car:\$ _____
4. Subtract down payment:\$ _____
5. Amount to be financed:\$ _____
6. 8% interest rate: x .08
7. Interest cost per year:\$ _____
8. 4 years of loan: x 4
9. Total interest cost:\$ _____
10. Total financed (add lines 5 and 9):\$ _____
11. Monthly payments (divide by 48):\$ _____
12. Total overall cost (add lines 4 and 10):\$ _____

MONEY ON WHEELS

(Continued)

— EXTENSIONS —

What other expenses come with car ownership? Things you may want to consider in your calculations include maintenance, license and registration, gasoline, insurance, parking fees, etc. Can you lower your insurance costs by maintaining a “B” average?

What portion of your total personal or family budget will the purchase and maintenance of a car require?

For advanced students: How does the cost of leasing a car compare with purchasing a car? To answer this question, you will need to:

- 1) Compare the down payment required for a purchase with the “start-up” costs of a lease.
- 2) Compare the monthly payments of a purchase with the monthly lease payments.
- 3) Compare the “trade-in price” at the end of the financing period with the “residual value” at the end of the lease period. The trade-in price is your equity in the car — the amount you could receive by selling it. By contrast, the residual value is the additional amount it would cost you to buy the car at the end of the lease period.
- 4) In general, with a lease you only finance the difference between the purchase price and the residual value — so with a similar down payment your monthly payments can be lower with a lease than with a purchase. But at the end of the lease, you don’t own the car.





PLANNING A PARTY

Pretend you got some good news: you have just received permission to have a party! The rest of the story: you and your friends must handle all the planning, preparation, and clean-up. You must stay within a budget of \$200. Form a party planning group of three or four members, then use the checklist below to help you plan. Look through the pages of *The Times* or *The Times* electronic edition to shop for the things you'll need for the party. Calculate your costs, then share your party plans with the class.

PARTY PLANNING CHECKLIST	
THEME:	_____ _____
INVITATIONS:	_____ _____
DECORATIONS	_____ _____
MUSIC OR ENTERTAINMENT:	_____ _____
GAMES OR ACTIVITIES:	_____ _____
FOOD:	_____ _____
BEVERAGES:	_____ _____
PAPER GOODS:	_____ _____

Have the class vote to decide which group planned the most creative party and stayed within the \$200 budget.

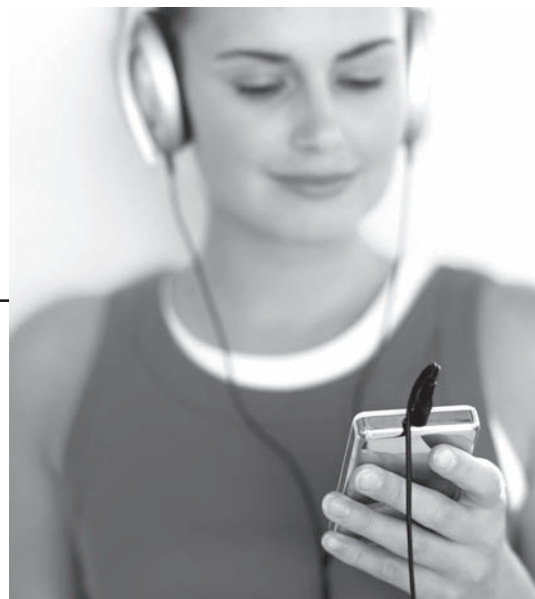
MONEY FOR “TOYS”

Most people are fascinated with electronic gadgets and computers. Advances in technology continually offer a vast array of new devices to make our lives simpler or more interesting. Many of these electronic “toys” come with some pretty hefty price tags. And consumers are often overwhelmed by a long and dazzling list of features. Careful planning will help you get the best value for your money.

Look through the pages of The Times or The Times electronic edition and locate ads for electronic devices such as cell phones, video cameras, computers, MP3 players, electronic games, etc.

Choose one of these categories and compare the information from several different ads, then:

1. Make a list of the features of each product.
2. Determine which of these features are most useful and which may be somewhat unnecessary.
3. Compare the cost of well-known brands and lesser-known brands.
4. Decide which product you would purchase if you were going to buy this item. Summarize the facts you would consider in making your decision.



— EXTENSIONS —

- See if you can locate any independent ratings to help you make a decision when you purchase electronic equipment.
- Repeat the steps in this lesson with other household products such as bread machines, microwaves, air purifiers, etc.



PAYING WITH PLASTIC

Credit cards can provide a convenient way for consumers to make purchases. Using a credit card reduces the need to carry around large amounts of cash. Credit card purchases can be made over the phone or online simply by using your credit card number. Credit card purchases are itemized on a monthly statement, enabling consumers to track their expenditures. By allowing consumers to make, in effect, pre-approved loans, credit cards can provide additional flexibility in managing a budget.

But it is important to use credit cards wisely. Because credit card users do not receive a bill for their purchases until up to a month later, it's easy to lose track of exactly what they've spent. It often doesn't feel like you're spending "real money" when you purchase something with a credit card — so it's easy for credit card debts to mount up quickly. But the bills you receive later are very real. And the minimum monthly payments on credit card debts often barely cover the interest costs — so credit card balances can decline very slowly.

When comparing different credit cards, some items to consider include:

- Interest rate: just as with any other type of consumer loan, the cost to the borrower is largely a function of the interest rate. Interest rates on credit cards are often higher than other forms of consumer debt such as car loans or home mortgages. Credit card interest rates can be variable or fixed. Some credit cards have "teaser" or introductory rates - special low interest rates that will last for a limited period of time.
- Annual fee: some cards charge an annual fee, whether you make any purchases with the card or not. Many other cards have no annual fees.
- Grace period: many credit cards do not charge interest if you pay your bill in full within 30 days of purchases.
- Minimum payment: this is the minimum amount you must pay towards your balance every month. It is usually calculated as a percentage of your balance (minimum payments of 1% to 3% are common). Smaller minimum payments may be easier to work into your budget, but it may also take you much longer to pay back your debts.
- Additional benefits and services: many credit card companies offer services such as extended warranties, insurance, travel reservations, etc. These benefits and services may be useful to some consumers, but relatively unimportant to others.
- Credit limit: the maximum credit card balance you may have at any one time.
- Secured credit cards: a card on which the credit limit is equal to an amount the cardholder has on deposit with the card issuer. These are often the only kind of credit cards available to people with little or no credit history.

PAYING WITH PLASTIC

(Continued)

Look through The Times or The Times electronic edition and find ads for three different credit cards. If you don't find ads for credit cards, try to locate ads for financial institutions or other organizations that offer credit cards. A wide variety of organizations – including gasoline companies, car manufacturers, airlines and retailers – now make credit cards available to their customers. You may wish to contact such organizations and ask about the incentives and special features offered with their credit cards. Or you may ask your parents or teacher for information from the credit card solicitations that they have received in the mail. Use information collected from the ads, organizations or mail solicitations to fill in the following table:

	Bank / Issuer	Interest Rate	Other Features
CARD 1:			
CARD 2:			
CARD 3:			

Which of the above cards do you think offers the better value? Why?

Do the cards offer any special features you think are valuable? What are they?

Think about how you would use a credit card as part of a balanced monthly budget plan. Then evaluate or discuss with your classmates each of the following ways to use credit cards:

Only use them for emergencies.

Charge as much as you want (up to your credit limit).

Use them whenever you're short of cash.

Use them for special purchases like gifts or vacations.

Only use them when you can pay off the balance in a month or two.

Which of the above strategies for using credit cards would you choose?



FINANCIAL GOALS & STRATEGIES FOR ACHIEVING THEM

The first step in achieving a financial goal — or any other kind of goal — is to devise a plan. In order to devise an effective plan, it is helpful to first establish priorities.

In the space below, list some ideas you have about your financial goals. It may help to brainstorm with a friend. Think about both immediate goals and long-term goals like a college education or home ownership.

Now divide the items on your list into two categories: short-term goals and long-term goals.

SHORT-TERM GOALS

LONG-TERM GOALS

Number the items on each list, with the most important goal #1, the second most important goal #2, etc.

FINANCIAL GOALS & STRATEGIES FOR ACHIEVING THEM (Continued)

Look at your two lists and think about actions you could take now that would help move you closer to your goals. Actions can include getting an education or training, savings and investment plans, strategies for earning money, etc. You should also identify resources that you could use to help you achieve your goals, such as advisors, books, agencies you can contact, etc.

Now describe a plan for reaching one of your short-term goals and one of your long-term goals. You may even find that some of your short-term goals will help you achieve some of your long-term goals. Set a time frame for your actions. For example, “each week I will. . .,” and “by November I will have. . .” Write your plan, including the actions you will take and the time frame, in the space below.



After you have written your plan, discuss it with your parents and friends. They may have some helpful ideas. Over time, refer back to your goals and evaluate your progress. You may also find that your goals or priorities change over time or a new opportunity may present itself. The goals in your plan are *your* goals — so you can revise and update them whenever you need to.

CONSUMER MATH GLOSSARY

Annual Percentage Rate

A way of expressing the interest rate on a loan or other debt which reflects all fees and other costs of borrowing. The APR is useful for comparing the costs of different loans.

ATM

Automated teller machine. Most banks offer their customers 24-hour access to many banking services through an ATM network. When you open a checking or savings account, you can receive an ATM card with your own personal identification number (PIN). By inserting this card into any ATM which is electronically linked to your bank, and entering your PIN, you can access your accounts and complete several types of banking transactions, including deposits, withdrawals, transfers, and getting your account balance.

“Bounced Check”

A check that is returned by your bank to the payee. Most often checks “bounce” because there is not sufficient money in the account to pay the check. Fees can be charged to the person who wrote the check — one fee is charged by the bank and another can be charged by the payee.



Budget

A plan for coordinating income and expenditures.

Cash

Includes coins and paper money in all denominations. Cash can be used to open a checking or savings account. Cash can also be used to purchase a cashier’s check or money order. Transactions where cash is not generally accepted include those done through the mail, like the payment of bills or mail order purchases.

Cashier’s Check

A check issued by a bank and drawn on the bank’s funds. Like traveler’s checks, the bank guarantees the money to pay the check. You don’t need to have an account to purchase a cashier’s check, but they must be purchased with cash. When a consumer is making a down payment on a car or a house, or leaving a deposit on an apartment, it is common for the seller or landlord to require a cashier’s check.

Certificate of Deposit

Also called a CD. This kind of savings account is a contract between a financial institution and an investor whereby the financial institution agrees to pay the investor a specified rate of interest for a specified term or length of time. If the investor withdraws funds from the CD before the term is complete, there is a penalty in the form of reduced interest.

CONSUMER MATH GLOSSARY

(Continued)

Checking Account	A kind of bank account that allows you to write personal checks which draw on the funds you have deposited.
Clearinghouse	The bank's bank. All banks use a clearinghouse to collect money from other banks. This is the midway point between money in your checking account and its arrival in the account of the individual or business to whom you wrote a check.
Compound Interest	Interest earned on interest. When you deposit funds in a savings account or other interest-bearing account, you earn interest on your deposit. If you leave the interest your original deposit earns in the account, you will also earn interest on the interest. This is called compounding.
Direct Deposit	A deposit made for you directly to a savings or checking account by a payor. In most cases, the payor is your employer who can, at your request, make a direct deposit of your paycheck into your bank account. This saves you a trip to the bank.
Discretionary Funds	Funds that are not required for regular expenses and may therefore be spent as you choose.
Expenses	These are the things on which you spend your money. Regular expenses include rent, food, utilities, and other items necessary for day-to-day living.
Income	This is all the money coming in to you during a set period. Individuals usually talk about their monthly income and their annual income. Income can include salary, interest, dividends, and gifts.
Individual Retirement Account	Also called an IRA. This is a tax-deferred retirement savings account. The immediate benefit is that the tax on money you deposit in an IRA is deferred until withdrawal, usually at retirement. There are significant tax penalties for early withdrawal from an IRA.
Inflation	A rise in prices over a period of time. During periods of high inflation, our dollars have less purchasing power — we get less for our money.
Interest	The cost of borrowing money. The lender earns interest and the borrower pays interest. When you deposit money in a bank, the bank pays you interest while it has the use of your money. When you borrow money from a bank, you pay interest to bank for the use of the bank's money. The consumer pays interest on a home mortgage, a car loan, or credit card debt. Consumers can earn interest on savings accounts, CDs, or savings bonds.

CONSUMER MATH GLOSSARY

(Continued)

Overdraft Notice	Notice sent to you by your bank when a check you have written exceeds the money in your account.
Passbook Account	A kind of savings account from which you may deposit or withdraw money at any time. Your transactions are recorded in a passbook.
Personal Check	A check issued by you and drawn on funds in your account. This is how many people pay their bills each month. These checks are usually imprinted with your name, address, and account number.
Savings Account	A bank account in which you deposit funds and earn interest. Types of savings accounts include passbook accounts and CDs.
Statement	A document prepared by your bank which summarizes all the transactions for your checking and savings accounts. Most banks send their customers a statement every month, or you may choose to receive an electronic statement instead of a paper one.
Stop Payment	A request you make to your bank when you do not want your bank to honor and pay one or more of your checks, for example if your checks have been lost or stolen. There is usually a fee to stop payment on a check.
Traveler's Checks	Checks you purchase from a bank. Traveler's checks are viewed as having a guarantee that they are "good," meaning that there is money behind them. Merchants and financial institutions see traveler's checks as being as good as cash. But to the person carrying them, they're even better because if your traveler's checks are lost or stolen you can replace them.
U.S. Savings Bonds	A kind of security that is issued by the federal government. The price actually paid for the bond is the issue price, the face value of the bond is a larger amount that reflects the interest the bond will earn. The face value is the value of the bond at maturity. Savings bonds maturity periods vary depending on the issue date.
Unit Price	The price per measure of an item. Unit pricing can help you compare the cost of different size containers or items sold in multiple quantities by telling you the cost per common measurement (for example, per pound or per ounce). This helps you get the best value for your money.
Yield	A way of expressing the interest earned on a deposit or other investment which includes the effects of compounding as well as any fees or other costs.

OPTIONAL ACTIVITIES FOR STUDENTS

Keep up with the news.

Follow news stories and features which deal with consumer issues. Watch for new legislation designed to protect consumers as well as “grass roots” movements by citizen groups to make constructive changes. Try to determine the “pro” and “con” arguments of a consumer issue and make up your own mind.

Talk where you shop.

Let businesses that you frequent know what you think about their policies and practices. Does the grocery store where you shop display the unit price for the products they sell? What is their policy regarding coupons? Do they offer discounted prices for large quantity purchases? Compliment the store for things you think it is “doing right” and make suggestions for changes you would like.

Conduct a survey.

Talk to friends and relatives about how they budget their money. Find out how many have regular savings plans, comparison shop, utilize unit pricing, etc. Ask about financial goals. Graph your findings.



OPTIONAL ACTIVITIES FOR STUDENTS

(Continued)

- Ask the experts.** There is a world of information available to people who ask questions. Search out the hidden resources around you. For instance, meet and talk with your local bank manager. Discuss your financial goals. See if the bank has information booklets or brochures that would help you on topics like financing a car, savings, investments, etc. Your local public library and the Internet can also be good sources of financial and consumer information.
- Share the word.** Develop a plan to share some of the information you learn with other students. Create an information booklet, a chart or poster, or make an oral presentation. Become a “mentor” for a younger student. Develop a resource network among your peers.
- Get a driving ambition.** Conduct a survey of car insurance companies to find out about their student rates. Ask about costs to be added to a family policy and costs for coverage on your own. Explore special discounts for good students, non-smokers, and drivers with good driving records. Discuss which models of cars are the most expensive to insure and why.
- Set some standards.** Establish a student “rating board” for products and services of interest to other young people your age. For instance, which fast food restaurant has the best quality and the best value for the price? Compare the cost of fast food to comparable quality items prepared at home. Other ideas for products to rate include: video games, athletic shoes, etc. Write a summary of your findings and share it with your classmates.
- Take stock.** Spend time looking at your own assets and liabilities. Brainstorm ideas for turning a hobby or special interest into a money-making venture. Look at the skills you have that might match some needs in your community. Are there volunteer opportunities that might help you to get some valuable experience in a field of interest? Make a personal inventory of your resources. Seek advice and feedback from people around you. Make the most of what you have.
- Start now.** Experts agree that you can never start managing your money too soon. The critical issue is not how much you save or invest, but how consistent you are over the long haul. Explore the ways you can make saving and investing part of your regular routine. As you finish school and increase your earning power you can build on the foundation that you begin now.