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Personal Finance

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Bob Hughes, professor of business at Dallas County Community Colleges, believes two words, Financial Literacy!, can literally change people's lives. Whether you want to be rich or just manage the money you have, the ability to analyze financial decisions and gather financial information are skills that can always be improved upon. In addition to writing several textbooks, Dr. Hughes has taught personal finance, introduction to business, business math, small business management, small business finance, and accounting since 1972. He also served as a content consultant for two popular national television series, and is the lead author for a business math project utilizing computer-assisted instruction funded by the ALEKS Corporation. He received his BBA from Southern Nazarene University and his MBA and EdD from the University of North Texas. His hobbies include writing, investing, collecting French antiques, art, and travel.

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Table of Contents

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Table of Contents

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Table of Contents

LWA/Dann Tardif/Getty Images

Table of Contents

Table of Contents

Features Table of Contents

Real-World Applications

Can you create and develop a budget? Do you know how to develop a financial career goal? These Unit Project features will help you get involved in the world of personal finance.

Unit Project

Discovery Project

College and Career Readiness

Features Table of Contents

Life Skills You Can Use

These features allow you to learn about many different finance-related careers as well as finance-related skills and information you will need to successfully meet your financial goals.

Careers That Count!

reality bytes

COMMON CENTS

Features Table of Contents

Improve Your Financial Skills

Do you know how a deficit can affect your own personal finances? Can you create a personal balance sheet? These features will help you improve your financial skills.

Economics and You

GO FIGURE Mathematics

Document Detective

Finance in the Real World

It is important to know how finance actually works in United States and global economies. These features will show you how financial topics affect real-world companies and individuals, and how financial topics affect people in different parts of the world.

ASK AN EXPERT

Around the World

Tanya Constantine/Getty Images

UNIT 2

Planning Personal Finances

Visual Literacy

Your skills, interests, and strengths can lead you to a rewarding career that will help you achieve your financial goals. ***What factors might influence your career path?***

In Your World

Discover a Career

Have you ever wondered why some people find great satisfaction in their work while others only do the minimum required? As with other personal decisions, choosing a career requires planning. When planning for a career, identify your interests and strengths and think about how they apply to various career fields. Use this information along with your research of job industries to help you choose a future career path. Which careers or career fields do you feel align with your strengths and interests?

College & Career READINESS

Career Planning Career planning often begins at a very young age. Many children dream of being a firefighter or a pilot, for example, only to change their mind a few years later. What were your first thoughts on a career? Did you change your mind? Explain why or why not.

Economics and You

Job Growth

Have you ever traded baseball cards or lunches with someone? Trade with foreign countries can also be mutually beneficial, even generating jobs in the United States. For example, the United States imports automobiles from Japan. Japan then uses the income to purchase cotton and airplanes from the United States. Jobs are created to produce the cotton and airplanes and to market and sell the automobiles. Consider a popular product. What industries are involved in the making and selling of that product? How could this impact job growth?

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Activity Download an Economics and You Worksheet Activity.

CHAPTER 3

Personal Financial Planning

Caia Images/Glow Images

Visual Literacy

Establishing a plan for how you spend your money can help you make wise purchases. ***What factors help you decide what to buy and what not to buy?***

Tanya Constantine/Getty Images

Discovery Project

Creating a Purchase Plan

Key Question

Why is it important to have a plan before making a financial decision?

Project Goal

You have a large family, but only one computer for everyone to use. It can be challenging to coordinate computer time with the other members of your household, so you have decided that it is time to get your own computer. Your family agrees, so they give you $50.00 to help out. You have about $400.00 saved from your part-time job. The computer you want is a laptop that has been advertised on television at a local store for $775.00, but your friend bought the same model directly from the manufacturer for $725.00. Develop a step-by-step financial plan that identifies what you must accomplish to buy the laptop in time for a major research project, which is due at the end of the school year.

Ask Yourself...

- *How much of your current savings can you reasonably contribute to the laptop?*
- *What other expenses will you have in the time frame?*
- *What risks may be associated with the purchase, and will the benefits outweigh the risks?*
- *How much more can you save by the end of the year?*
- *What can you do to find the best price on the laptop?*
- *What steps in your plan ensure that you will accurately track your spending and saving?*

21st Century Skills

Manage Goals and Time

How can creating a written plan for a significant purchase, such as a laptop, help you manage your time and meet your financial goals?

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Evaluate Download an assessment rubric.

THE BIG IDEA

Financial planning can lead to financial independence and security.

ASK AN EXPERT

The Money Plan

Q *I am a high school student. I do not have money for investments or buying property. So what difference does it make how I spend my money now?*

A You will not always be a student. Learning to save and use money wisely now will help you know how to achieve financial security in the future. While you are in high school, financial planning can help you decide how to spend, save, and invest your money for special purchases or activities that matter to you. You may even be able to buy stock!

Writing Activity

Make a list of five or more items you would like to purchase. Write a short report comparing the costs and benefits of purchasing each item. How much time do you think it will take to save the money for each? How can this activity be considered financial planning?

Reading Guide

Before You Read

The Essential Question Why is it important to learn now how to plan for your financial future?

Main Idea

The financial planning process can help you reach your financial goals.

Content Vocabulary

- personal financial planning
- goals
- values
- liquidity
- service
- good
- consumer
- interest
- time value of money
- principal
- future value
- annuity
- present value

Academic Vocabulary

You will see these words in your reading and on your tests.

- estimate
- consume
- weigh
- accumulate

Graphic Organizer

Before you read this chapter, create a study organizer like the one below. As you read, identify four guidelines for setting your financial goals.

connectED.mcgraw-hill.com Download this graphic organizer.

Personal Financial Decisions

What are the benefits of financial planning?

What is personal finance? It is everything in your life that involves money. **Personal financial planning** is arranging to spend, save, and invest money to live comfortably, have financial security, and achieve goals. Everyone has different financial goals. **Goals** are the things you want to accomplish. For example, getting a college education, buying a car, and starting a business are goals. Planning your personal finances is important because it will help you to reach your goals, no matter what they are. It is up to you to make and follow a financial plan.

Some of the benefits of planning are:

- Increased effectiveness in obtaining, using, and protecting your financial resources throughout your life
- Increased control of your finances by avoiding too much debt, bankruptcy, and dependence on others
- Improved personal relationships gained from well-planned and well-communicated financial decisions
- A sense of freedom from financial worries gained from looking to the future, anticipating expenses, and achieving personal economic goals

We all make hundreds of decisions each day. Most of these decisions are quite simple and have few consequences. However, some are complex and have long-term effects on our personal and financial situations. While everyone makes decisions, few people consider how to make better decisions. The financial planning process can be viewed as a six-step process that can be adapted to any life situation.

STEP 1 Determine Your Current Financial Situation

To figure out your current financial situation, make a list of items that relate to your finances:

- Savings
- Monthly income (job earnings, allowance, gifts, and interest on bank accounts)
- Monthly expenses (money you spend)
- Debts (money you owe to others)

A good way to **estimate,** or make an approximate calculation of, your expenses is to keep a careful record of everything you buy for one month. You can use a small notebook or computer to track your expenses. When you have determined your financial situation, you will be able to start planning.

Section Objectives

- **Define** personal financial planning.
- **List** the six steps of financial planning.
- **Identify** factors that affect personal financial decisions.

As You Read

Relate What are your financial goals? Which goals are needs and which goals are wants?

Careers That Count!

Jason Coupland • Personal Banker

As a personal banker for a national bank, I develop, manage, and build customer relationships. My clients range from high school students opening their first accounts, to businesspeople seeking precise financial products and services. Throughout the week, I oversee the financial operational activities for personal accounts. I process all new account transactions and help customers choose appropriate accounts and banking investment options. My ongoing challenge is to recognize the needs of each individual and match those needs to the bank's services. Thanks to my knowledge of the banking industry and the stock market, I can offer advice to clients and help resolve complaints and issues about their finances. I also provide leadership, training, and support to newly hired staff. If you enjoy working with people and gain satisfaction from helping them reach their financial goals, this may be a good career choice for you.

EXPLORE CAREERS

Visit the Web site of the U.S. Department of Labor's Bureau of Labor Statistics and obtain information about a career as a personal banker.

1. With electronic banking services, explain why personal bankers and loan officers are still in demand.
2. How might this career change in the future?

CAREER FACTS

Skills	Education	Career Path
Communication, customer-service, computer, interpersonal, math, sales, cross-selling, and second language skills	Associate's degree or bachelor's degree with a major in business administration or economics	Personal bankers can become Licensed Private Bankers, District Managers, or Mortgage Consultants

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Activity Download a Career Exploration Activity.

STEP 2 Develop Your Financial Goals

To develop clear financial goals, think about your attitude toward money and ask yourself some questions: Is it more important to spend your money now or to save for the future? Would you rather get a job right after high school or continue your education? Will your chosen career require additional training or education in the future? Do your personal values affect your financial decisions? **Values** are the beliefs and principles you consider important, correct, and desirable. Different people value different things.

Needs and Wants You should periodically analyze your financial values and goals. The purpose of this analysis is to differentiate your needs from your wants. Remember, a need is something you must have to survive, such as food, shelter, and clothing. A want is something you desire or would like to have or do. For example, if you live in an area where the winter is cold, you need a coat. So you may want a leather jacket, but other less expensive coats would also keep you warm. Only you can decide what specific goals to pursue. For example, you might want to save money. So, you could save $50 every month or 15 percent of every paycheck.

STEP 3 Identify Alternative Courses of Action

It is impossible to make a good decision unless you know all your options. Generally, you have several possible courses of action. Suppose that you are saving $50 a month. You might have these options:

- **Continue the same course of action.** You may choose not to change anything.
- **Expand the current situation.** You may decide to increase the amount of money you save every month to $60.
- **Change the current situation.** You could invest in stocks instead of putting your money into a savings account.
- **Take a new course of action.** You could use the $50 to pay off your debts.

Not all of these categories will apply to every decision; however, in each case, be aware that the costs of your decision may outweigh the benefits.

STEP 4 Evaluate Your Alternatives

In this step, you evaluate your alternatives as part of the financial planning process. Use the many sources of financial information that are available. (See **Figure 1.**) Look at your situation in life, your present financial situation, your personal values, and current economic conditions. Consider the consequences and risks of each decision you make.

Sources of Financial Information Relevant and up-to-date information is required at each stage of the decision-making process. Common sources available to help you with your financial decisions include:

- the Internet
- financial institutions such as banks and investment companies
- media sources such as newspapers, magazines, television, and radio
- financial specialists such as financial planners, lawyers, and tax preparers

COMMON ¢ENTS

Pay Yourself First
When you receive your paycheck, pay yourself first. This means that before you pay bills or buy anything, you should put something into your savings account—even a small amount. Think of it as paying yourself. Try saving a percentage of your take-home pay or allowance—1 percent the first month, 2 percent the second month, and so forth. Then sit back and watch your money grow.

Concept Application

If your take-home pay is $860 a month and you save the percentages listed above for 12 months, how much would you have?

Jose Luis Pelaez, Inc./Getty Images

Know Your Options
People have a variety of choices when making routine purchases. *What are the benefits of shopping at thrift shops, swap meets, or discount stores?*

Consequences of Choices When you choose one option, you eliminate other possibilities. You cannot choose all options. Suppose that you want to become a full-time college student. You also want the income you would earn at a full-time job. In choosing to pursue your education, you give up the opportunity to work full time, at least for the moment. Remember, an opportunity cost is what is given up when making one choice instead of another. The opportunity cost of going to college would be the benefit of having a full-time job. However, choosing involves more than knowing what you might give up. It also involves knowing what you would gain. For example, by going to college, you could gain a higher-paying job.

Evaluating Risks If you decide to ride your bicycle on a very busy city street, you are taking a risk of having an accident. When you make a financial decision, you also accept certain financial risks. Some types of financial risks include:

- **Inflation Risk** If you wait to buy a car until next year, you accept the possibility that the price may increase.
- **Interest Rate Risk** Interest rates go up or down, which may affect the cost of borrowing or the profits you earn when you save or invest.

FIGURE 1 **Financial Planning Resources**

Get the Facts Information on financial planning can come from many sources. *Which resources might you contact if you want information about saving for college?*

1 **Financial Specialists:** accountants, bankers, financial planners, insurance agents, tax attorneys, and tax preparers

2 **Technology:** computer software and the Internet

(l)CORBIS Royalty-Free; (r)BananaStock/Alamy

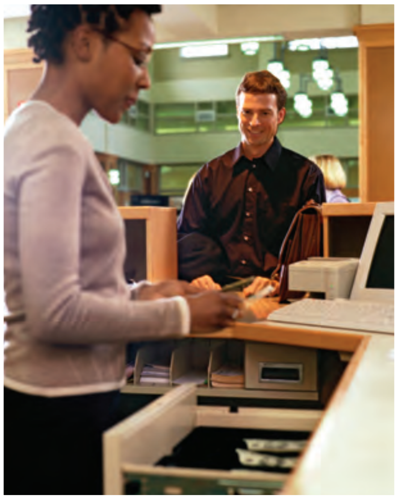
- **Income Risk** You may lose your job due to unexpected health problems, family problems, an accident, or changes in your field of work.
- **Personal Risk** Driving for eight hours on icy mountain roads may be hazardous. The risk may not be worth the money you would save on airfare.
- **Liquidity Risk** **Liquidity** is the ability to easily convert financial assets into cash without loss in value. Some long-term investments, such as a house, can be difficult to convert quickly.

STEP 5 Create and Use Your Financial Plan of Action

A plan of action is a list of ways to achieve your financial goals. If your goal is to increase your savings, a plan of action could be to cut back on spending in a particular area of your budget such as spending on entertainment. If you want to increase your income, you might get a part-time job, work more hours at your present job, or take part of your current income and invest it. You could use the extra money you earn to pay off debts, save money, purchase stocks, or make other investments.

3 **The Media:** books magazines, newsletters, newspapers, radio, and television

4 **Financial Institutions:** banks, credit unions, insurance and investment companies, and savings and loan associations



5 **Education:** high school and college courses and seminars

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A Monthly Budget Worksheet

A monthly budget worksheet helps you analyze and compare your monthly expenses to the income you receive each month. This analysis helps you plan your spending. A monthly budget worksheet contains the following information:

- Income
- Payroll deductions
- Take-home pay
- Other income
- Expenses
- Income less expenses

Janet Lopez's Monthly Budget Worksheet

Monthly Income	Amount	Variable Monthly Expenses	Amount
Wages (before taxes)	$3500	Utilities (gas, electric)	$75
Allowance	0	Telephone/Cell phone	65
Other income	35	Groceries	135
Payroll Deductions		Clothing	75
Federal tax	$700	Credit card	150
Social Security tax	268	Donations	25
State tax	175	Gasoline	85
Local tax	35	Personal items	45
Other	0		
Total Take-Home Income	**$2357**		
Fixed Monthly Expenses		**Discretionary Monthly Expenses**	
Savings	$100	Movies	$15
Rent/Mortgage	750	Hobbies	35
Car loan	425	Restaurants	55
Vehicle and apartment or house insurance	125	Other	155
Life and health insurance	55		
Cable TV/Internet access	95	**Total Expenses**	**$2465**
		Income Less Expenses	**– $108**

Key Points You create a budget by determining your take-home income. Take-home income is the difference between your wages and deductions. Taxes, union dues, and health insurance are examples of wage deductions. Expenses are also listed. Some expenses are fixed. They do not change. Variable expenses change each month. Discretionary expenses do not include expenses for basic needs.

FIND the Solutions

Review Key Concepts

1. Explain the difference between fixed expenses and variable expenses.
2. List other possible expenses that are not listed on this worksheet.
3. Decide if Janet has enough monthly income for monthly expenses.
4. Explain why utilities are a variable expense.
5. Suggest ways this budget can be balanced.

STEP 6 Review and Revise Your Plan

Financial planning continues as you follow your plan. As you get older, your finances and needs will change. That means that your financial plan will have to change too. You should reevaluate and revise it every year.

Reading Check

Define What is liquidity?

Developing Personal Financial Goals

What should you consider to set financial goals for yourself?

Why do so many people have money problems? The main reason is that they do not plan how they will use their money. You can help to avoid money problems by planning with some clear financial goals in mind.

Types of Financial Goals

Two factors will influence your planning for financial goals. The first factor is the time frame in which you would like to achieve your goals. The second factor is the type of financial need that inspires your goals.

Time Frame of Goals Goals can be defined by the time it takes to achieve them:

- **Short-term goals** take one year or less to achieve (such as saving to buy a computer).
- **Intermediate goals** take two to five years to achieve (such as saving for a down payment on a house).
- **Long-term goals** take more than five years to achieve (such as planning for retirement).

Start with short-term goals that may lead to long-term ones. Some goals, such as having money for the holidays or other special occasions, occur every year. Other goals, such as buying a car, may come up only occasionally. What are some of your short-term, intermediate, and long-term financial goals?

Goals for Different Needs The need to have your hair cut at a salon is different from the need to buy a new car. A haircut is a **service**, or a task that a person or a machine performs for you. A new car is a **good**, or a physical item that is produced and can be weighed or measured. You might buy bottled water every day. You might buy a new car every five or six years.

How you establish and reach your financial goals will depend on whether a goal involves the need for consumable goods, durable goods, or intangible items:

- **Consumable goods** are purchases that you make often and **consume,** or use up, quickly. Food and products, such as shampoo and conditioner, are in this category.
- **Durable goods** are expensive items that you do not purchase often. Most durable goods, such as cars and large appliances, will last three years or more when used on a regular basis.
- **Intangible items** cannot be touched but are often important to your well-being and happiness. Examples of intangibles include your personal relationships, health, education, and free time. Intangibles are often overlooked but can be very expensive.

FIGURE 2 Financial Goals and Activities for Various Life Situations

Financial Goals Your financial needs and goals change at different stages of life. *What are some goals you will have ten years from now that you do not have today?*

Life Situation	Financial Goals and Activities
Young single adult	• Obtain career training. • Become financially independent. • Obtain health insurance. • Develop a savings plan. • Carefully manage your use of credit.
Young couple with no children	• Create an effective financial record-keeping system. • Obtain adequate health and life insurance. • Implement a budget. • Carefully manage your use of credit. • Develop a savings and investment program.
Couple with young children	• Purchase a home. • Obtain adequate health and life insurance. • Start a college fund. • Make a will and name a guardian for your children.
Single parent with young children	• Obtain adequate health, life, and disability insurance. • Make a will and name a guardian for your children. • Establish an emergency fund.
Middle-aged, single adult	• Contribute to a tax-deferred retirement plan. • Evaluate and select appropriate investments. • Accumulate an adequate emergency fund. • Review will and estate plans.
Older couple with no children at home	• Plan retirement housing, living expenses, and activities. • Obtain health insurance for retirement. • Review will and estate plans.

Guidelines for Setting Goals

How can you make good financial decisions? You must identify your goals. Then identify the time frame for achieving each goal and the type of need. However, these factors will change as you go through life. The financial goals you set as a student will be different from the goals you may have if you marry or have children. **Figure 2** shows examples of financial goals and activities related to various life situations.

When setting your financial goals, follow these guidelines:

1. Your financial goals should be realistic.
2. Your financial goals should be specific.
3. Your financial goals should have a clear time frame.
4. Your financial goals should help you decide what type of action to take.

Reading Check

List What are some examples of intangible items?

Influences on Personal Financial Planning

What factors can influence your personal financial planning?

Many factors will influence your day-to-day decisions about finances. The three most important factors are:

- Life situations
- Personal values
- Economic factors

Life Situations and Personal Values

As you enter adulthood, you will experience many changes. You may go to college, start a new career, get married, have children, or move to a new city. These new life situations will affect your financial planning. Your personal values also influence your financial decisions.

For example, Angela just graduated from high school and will be going to college in the fall. She will move out of her parents' house and live in the college dorm. Angela is beginning a new and exciting stage in her life. She values independence, and so she plans to move to an apartment with a roommate in her sophomore year. She will experience more personal freedom, but with her independence will also come more financial responsibility.

Economic Factors

Economic factors across the country and around the world can affect personal finances. They play a role in day-to-day financial planning and decision making for most people. Economics is the study of the decisions that go into making, distributing, and using goods and services. The economy consists of the ways in which people make, distribute, and use their goods and services. To understand economics and the economy, you need to be aware of the market forces, financial institutions, global influences, and economic conditions that affect global as well as personal decisions.

Market Forces The forces of supply and demand determine the prices of products, or goods and services, you purchase. Supply is the amount of goods and services available for sale. Demand is the amount of goods and services people are willing to buy. When there is a high demand for an item, such as a popular toy, or when a company cannot manufacture enough of a certain product to keep up with the demand, the price of the product rises. When there is little demand for a product, or when a company produces more than it can sell, the price of the product drops.

Financial Institutions Most people do business with financial institutions, which include banks, credit unions, savings and loan associations, insurance companies, and investment companies. Financial institutions provide services that increase financial activity in the economy. For example, they handle savings and checking accounts, provide loans, sell insurance, and make investments for their clients.

Among the various government agencies that regulate the financial activities of financial institutions, the Federal Reserve System has a significant responsibility in the U.S. economy. Remember, the Federal Reserve System is the central banking organization of the United States. Its primary role in the U.S. economy is the regulation of the money supply. The Fed controls the money supply by determining interest rates and by buying or selling government securities. Its decisions affect the interest rate you earn on your savings, the interest rate you pay when you borrow money, and to some extent the prices of the products you buy.

Global Influences You and the money you spend are part of the global marketplace, which is another economic factor that can affect financial planning. Look at the items in your home or classroom and you will discover that many of the products were made in other countries.

The economy of every nation is affected by competition with other nations. Each country wants consumers in other countries to buy their products. When other countries sell more goods to the United States than U.S. companies can sell in those markets, more money leaves the United States than enters it. Then less money is available for spending and investing, and interest rates may rise. These global influences also affect financial decisions.

Economic Conditions

Current economic conditions can also affect your personal financial decisions. **Figure 3** shows how economic conditions can influence financial planning. Three important economic conditions are:

1. Consumer prices
2. Consumer spending
3. Interest rates

Consumer Prices Over time the prices of most products go up. Remember, this rise in the level of prices for goods and services is called inflation. During times of rapid inflation, it takes more money to buy the same amount of goods and services. For example, if the rate of inflation is 5 percent, then a computer that cost $1,000 a year ago would now cost $1,050 if the computer price increased at the inflationary rate.

The main cause of inflation is an increase in demand without an increase in supply. For example, if people have more money to spend because of pay increases or borrowing, but the same amounts of goods and services are available, then prices will rise. Inflation can be especially hard on certain groups, such as retired people whose income may not increase. The inflation rate affects consumer prices and varies from year to year. Remember, the consumer price index (CPI) published by the Bureau of Labor Statistics, is a measure of the average change in prices consumers pay for a fixed "basket" of goods and services. In the early 1960s, the annual inflation rate was between 1 and 3 percent. In the late 1970s and early 1980s, the inflation rate climbed to 10–12 percent each year. More recently it slowed to 2–4 percent each year.

Consumer Spending A **consumer** is a person who purchases and uses goods or services. You are a consumer whenever you buy anything—a CD, books, clothes, lunch, or even a haircut. Consumer spending affects the economy by helping to create and maintain jobs. When people buy more goods or services, companies have to hire extra employees to meet the demand. This situation leads to a higher rate of employment, making more jobs available. More people work, and they have more money to spend. However, when consumers buy fewer goods and services, companies have to produce less and lay off workers. Then unemployment rises, making jobs harder to find.

Interest Rates Like everything else, money has a price, and this price is called interest. **Interest** is the price that is paid for the use of another's money. Interest rates also affect the economy. When you deposit your paycheck in a savings account, the interest you receive is money the bank or another financial institution pays you for the use of your money. The bank, in turn, uses your money to make loans to people who want to purchase items such as houses, automobiles, and new businesses. Borrowers who receive the loans must pay a fee, or interest, to the bank or lending institution.

College & Career READINESS

Adaptability

One of the most important characteristics of successful people is that they are adaptable. Adaptability is the ability to change to fit changed circumstances or requirements. People who are adaptable learn from their experiences. You can benefit from taking an adaptable attitude toward almost any issue you might encounter at home, at school, at work, and in the community.

Write About It

Think of a scenario in which having an adaptable mind-set would help you at school. Write one or more paragraphs to describe the scenario and explain how having an adaptable attitude would have a positive influence on the situation.

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Activity Download a Career and College Readiness Worksheet Activity.

Interest rates represent the cost of money. When consumers increase their savings and investments, the supply of money that is available for others to borrow grows, and interest rates go down. When consumers borrow more money, the demand for money increases, and interest rates go up.

Interest rates on loans also rise during times of inflation. Whether you save, invest, or obtain loans, interest rates will affect your financial planning. The earnings you receive from your savings account or the interest you pay on a loan depend on the current interest rates. Higher interest rates make credit more expensive thus discouraging borrowing and making saving more attractive. Interest rates are just one economic factor that influences your personal financial planning.

FIGURE 3 Economic Conditions and Financial Planning

Economic Conditions Economic conditions will affect your financial planning. *Choose an economic condition from this or previous chapters, and explain how it affects your life today.*

Economic Condition	What It Measures	How It Influences Financial Planning
Consumer prices	The value of a dollar; changes in inflation	If consumer prices increase faster than wages, the value of the dollar decreases—a dollar buys less than it did before. Consumers tend to buy fewer goods and services. Lenders charge higher interest rates.
Consumer spending	Demand for goods and services by individuals and households	Increased consumer spending usually creates more jobs and higher wages. Reduced consumer spending causes unemployment to increase.
Interest rates	Cost of money, cost of credit when you borrow, and the return on your money when you save or invest	Higher interest rates make borrowing money more expensive and make saving more attractive. When interest rates increase, consumer prices tend to increase.
Money supply	The dollars available for spending in our economy	The Federal Reserve System (Fed) sometimes adjusts interest rates in order to increase or decrease the amount of money circulating in the economy. If the Fed lowers interest rates, the money supply increases. If the Fed raises interest rates, the money supply decreases.
Unemployment	The number of people without jobs who are willing and able to work	Low unemployment increases consumer spending. High unemployment reduces consumer spending.
Gross domestic product (GDP)	Total dollar value of all the goods and services produced in a country in one year	The GDP provides an indication of how well people are living in a country.

SECTION 1 Assessment

Review Key Concepts

1. **Define** What is personal financial planning?
2. **List** Name the six steps of financial planning.
3. **Identify** What factors affect personal financial decisions?

Higher Order Thinking H.O.T.

4. **Theorize** Often people with conflicting financial values and practices experience challenges in their business or personal relationships. How could such problems be minimized or prevented using what you have learned in this chapter?

21st Century Skills

5. **Work Creatively with Others** Imagine that your economics class has just ended, and you and a classmate are having lunch together. Your classmate, reflecting on the current chapter, says that she never sets any financial goals and that her financial success or failure happens by luck. With your teacher's permission, work with a partner to role-play a response to your classmate's philosophy. Explain to the classmate how planning, more than luck, determines financial success or failure.

Mathematics

6. **Effects of Inflation** Matthew has been saving money from his summer job for the past two years. He has been doing this in order to purchase a used car so he does not have to rely on his older brother for transportation. Two years ago the price of the car he wanted was $2,600. The inflation rates over the past two years were 3 percent and 2.5 percent, respectively. Assuming the price of the car increased at the inflationary rates, how much did Matthew have to save in order to purchase the used car today?

   Math Concept **Calculate the Impact of Inflation** To calculate the impact of inflation, you must first determine the inflation rate and add this percentage increase to the base price.

   Starting Hint Multiply the price of the car two years ago by the first year's inflation rate and add this amount to the price two years ago in order to determine the new price after year one.

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Jeffrey Coolidge/Getty Images

Section Objectives

- **Explain** the opportunity costs associated with personal financial decisions.
- **Understand** the time value of money.
- **Identify** eight strategies for achieving financial goals at different stages of life.

As You Read

Consider Is it important to start planning your financial future and monitoring your spending now? Why or why not?

Personal and Financial Opportunity Costs

What are personal and financial opportunity costs?

As previously discussed, whenever you make a choice, you have to give up, or trade off, some of your other options. When making your financial decisions and plans, you must **weigh,** or consider, both the personal and financial opportunity costs carefully.

Personal Opportunity Costs

Like financial resources, your personal resources—your health, knowledge, skills, and time—require management. Do you eat a lot of junk food and avoid exercise? Do you get enough sleep each night? The decisions you make about your health now can have consequences as you get older.

In much the same way, the financial decisions you make today will affect your financial health in the future. For example, suppose that you and your friends have tickets to a sold-out concert this Thursday night. On Thursday afternoon your teacher announces an important test for Friday. You must decide whether you will go to the concert, study for the test, or somehow do both. The opportunity cost of going to the concert might be getting a good grade on the test. You have to decide how to use your time to meet your needs, to achieve your goals, and to satisfy your values.

Financial Opportunity Costs

You also must make choices about how you spend money. For example, would you buy the $129 pair of sneakers you saw at the mall or save that money? You cannot do both, because most people have a limited amount of money. To help make choices, consider the **time value of money,** which is the increase of an amount of money due to earned interest or dividends. If you decide to save or invest the $129 instead of buying the sneakers, that money could be worth more later because you would earn interest or dividends on it. On the other hand, perhaps your sneakers are worn out. In that case, your current needs would determine that trading off interest earnings is worthwhile.

Every time you spend, save, or invest money, think about the time value of that money as an opportunity cost. For example, spending money from your savings account means lost interest earnings; however, what you buy with that money may have a higher priority than those earnings.

GO FIGURE Mathematics

Annual Interest

Interest is extra money earned from money in an account.

EXAMPLE You just deposited $1,000 in a savings account. The bank will pay you 3 percent annual interest. How much interest will you earn if you keep your money in the bank for one year?

Formula Principal × Annual Interest Rate = Interest Earned for One Year
Solution $1,000 × .03 = $30
You will earn $30 in interest.

Your Turn

What if your sister deposited $50 for one year at the same interest rate? How much would she have?

Calculating Interest You can calculate the time value of your savings by figuring out how much interest you will earn. To do this, you need to know the principal, the annual interest rate, and the length of time your money will be in the account.

For a savings account, the **principal** is the original amount of money on deposit. (For a loan, the principal is the amount that you borrow.) When you open a savings account, the bank or financial institution identifies the interest rate for your account. This is usually given as an annual percentage so that you know how much you will earn each year. By comparing interest rates at several financial institutions, you can figure out which one will make your money grow the fastest.

You can figure out how much interest your money will earn in the first year by multiplying the principal by the annual interest rate.

Future Value of a Single Deposit **Future value** is the amount your original deposit will be worth in the future based on earning a specific interest rate over a specific period of time. Figure out how much your savings will earn and grow by multiplying the principal by the annual interest rate and then adding that interest amount to the principal.

You can determine the future value for two years, three years, and so on. Each year, interest is earned on your principal and on previously earned interest. To calculate the interest earned for the second year, add interest earned in the first year to the principal. Then take that amount and multiply it by the annual interest rate.

Future value computations are also called *compounding*. With compounding, your money increases faster over time. If you make deposits now, your money will have more time to increase. For example, depositing $1,000 at age 40 in an account with 5 percent interest will give you $3,387 at age 65. However, if you deposit the same $1,000 at age 25 you would have a balance of $7,040 at age 65.

Make Time for Fun

As with managing money, you may need to consider trade-offs when managing your time. *What can you do to manage your study time so that you still have time for the activities you enjoy?*

GO FIGURE Mathematics

The Future Value of a Single Deposit

When you earn interest from money you deposit in the bank, your balance increases over time.

EXAMPLE You just deposited $1,000 in a savings account that will pay you 3 percent (.03) annual interest. You earned $30 in interest after the first year. How much will you earn after two years?

Formula (Principal + Previously Earned Interest) × Annual Interest Rate = Interest Earned for the Second Year

Solution ($1,000 + $30) × .03 = $30.90

You will earn $30.90 in interest.

$1,030 + $30.90 = $1,060.90 The future value of your original deposit will be $1,060.90 after two years.

Your Turn

What if you decided to deposit more money, say, $1,500? With 3 percent annual interest, how much would you have after three years?

Future value tables simplify the process of figuring out the effect of compounding. Many online future value calculators are available. The table in Part A of **Figure 4** shows the future value of a single deposit of $1. To use the table, find the annual interest rate that your money is earning. Then see what the future value is at Year 5, Year 6, and so on. Multiply the future value figure by the amount of your deposit. For example, if you deposit $1 in a 7 percent account, at the end of Year 7, you would have $1.61:

$$\$1 \times 1.606 = \$1.606$$

Future Value of a Series of Deposits Some savers like to make regular deposits into their savings. A series of equal regular deposits is sometimes called an **annuity**. Use Part B of the chart in **Figure 4** to find out the future value of $1,000 a year at 5 percent annual interest for six years. At the end of the six years, you would have $6,802:

$$\$1{,}000 \times 6.802 = \$6{,}802$$

Present Value of a Single Deposit You can also calculate the **present value**, which is the amount of money you would need to deposit now in order to have a desired amount in the future. For example, if you want to have $1,000 in five years for a down payment on a car, and your savings account pays 5 percent annual interest, how much money will you need to deposit now to **accumulate,** or collect, $1,000? Part C of **Figure 4** will help you find the answer. Find Year 5 in the left column, and look across to the 5 percent interest-rate column. The value given is 0.784. Multiply this value by the amount of money you want to have in five years:

$$\$1{,}000 \times 0.784 = \$784$$

You need to deposit $784 now to have $1,000 in five years.

FIGURE 4 Future and Present Value Tables

Time Is Money Future value tables can save you time and reduce errors when you compute interest over a long period of time. Present value tables can help you figure out how much you need to deposit now in order to have a certain amount of money in the future. *How much money will you have if you save $2,000 a year for ten years at 9 percent interest?*

A. Future Value of a Single Deposit of $1

	Annual Interest Rate				
Year	5%	6%	7%	8%	9%
5	1.276	1.338	1.403	1.469	1.539
6	1.340	1.419	1.501	1.587	1.677
7	1.407	1.504	1.606	1.714	1.828
8	1.477	1.594	1.718	1.851	1.993
9	1.551	1.689	1.838	1.999	2.172
10	1.629	1.791	1.967	2.159	2.367

B. Future Value of a Series of Equal Annual Deposits

Year	5%	6%	7%	8%	9%
5	5.526	5.637	5.751	5.867	5.985
6	6.802	6.975	7.153	7.336	7.523
7	8.142	8.394	8.654	8.923	9.200
8	9.549	9.897	10.260	10.637	11.028
9	11.027	11.491	11.978	12.488	13.021
10	12.578	13.181	13.816	14.487	15.193

C. Present Value of a Single Deposit

Year	5%	6%	7%	8%	9%
5	0.784	0.747	0.713	0.681	0.650
6	0.746	0.705	0.666	0.630	0.596
7	0.711	0.665	0.623	0.583	0.547
8	0.677	0.627	0.582	0.540	0.502
9	0.645	0.592	0.544	0.500	0.460
10	0.614	0.558	0.508	0.463	0.422

D. Present Value of a Series of Equal Annual Deposits

Year	5%	6%	7%	8%	9%
5	4.329	4.212	4.100	3.993	3.890
6	5.076	4.917	4.767	4.623	4.486
7	5.786	5.582	5.389	5.206	5.033
8	6.463	6.210	5.971	5.747	5.535
9	7.108	6.802	6.515	6.247	5.995
10	7.722	7.360	7.024	6.710	6.418

Malaysia

Licensed Financial Planners

Many people find the idea of personal financial planning to be daunting. The profession of financial planner has developed to help people set their financial goals and take the appropriate actions to meet them. People must be able to trust their financial planner with the personal information that is shared. Malaysia has answered this concern by being the first country to introduce legislation that requires a financial planner to be licensed. As the profession has become more popular, an organization—Financial Planning Association of Malaysia (FPAM)—has been developed to better help the public understand what financial planning is and the role of a financial planner. The organization also aids individuals in finding a trustworthy financial planner to work with.

Included on the FPAM Web site are a list of frequently asked questions, which include a definition of and a six-step process for financial planning; resources such as links to articles and journals about financial planning, information about classes and certifications for financial planners, and a directory of professional financial planners.

Critical Thinking

1. **Expand** Research FPAM and the certification requirements. What are the requirements for becoming a licensed financial planner in Malaysia?
2. **Relate** Do you feel the government should place requirements on specific professions? If so, what other professions do you think should be regulated by the government? If not, why?

Travelpix Ltd/Getty Images

DATABYTES

Capital
Kuala Lumpur

Population
30,073,353

Language
Bahasa Malaysia, English, Chinese, Tamil, Telugu, Malayalam, Panjabi, Thai, and other indigenous languages

Currency
Malaysian Ringgit

Gross Domestic Product (GDP)
$312.4 billion

GDP per capita
$17,500

Industry:
Rubber and palm oil processing and manufacturing, electronics, tin melting and smelting, logging, timber processing, petroleum production and refining

Agriculture:
Rubber, palm oil, cocoa, rice, timber, pepper

Exports:
Electronic equipment, petroleum and liquefied natural gas, wood and wood products, palm oil, rubber, textiles, chemicals

Natural Resources:
Tin, petroleum, timber, copper, iron ore, natural gas, bauxite

Present Value of a Series of Deposits You can also use present value calculations to determine how much you would need to deposit so you can take a specific amount of money out of your savings account for a certain number of years. If you want to take $400 out of your account each year for nine years, and your money is earning interest at 8 percent a year, how much money would you need to deposit now? Part D of **Figure 4** will help you find the answer. Find Year 9 in the left column and look across to the 8 percent interest-rate column. The value given is 6.247. Multiply this value by the amount of money that you want to take out every year:

$$\$400 \times 6.247 = \$2{,}498.80$$

You need to deposit $2,498.80 now to be able to take out $400 each year for nine years. This calculation is used for retirement.

Reading Check

Explain What is meant by the future value of money?

Achieving Your Financial Goals

What strategies can you use to reach your financial goals?

Throughout your life you will have many different financial needs and goals. By learning to use your money wisely now, you will be able to achieve many of those goals.

Financial planning involves choosing a career and then learning how to protect and manage the money you earn. By using eight strategies, you can avoid many common money mistakes:

1. **Obtain** Obtain financial resources by working, making investments, or owning property. Obtaining money is the foundation of financial planning because you will use that money for all other financial activities.
2. **Plan** The key to achieving your financial goals and financial security is to plan how you will spend your money.
3. **Spend Wisely** Many people spend more than they can afford. Other people buy things they can afford but do not need. Spending less than you earn is the only way to achieve financial security.
4. **Save** Long-term financial security starts with a savings plan. If you save on a regular basis, you will have money to pay your bills, make major purchases, and cope with emergencies.
5. **Borrow Wisely** When you use a credit card or take out another type of loan, you are borrowing money. Borrowing wisely—and only when necessary—will help you achieve your financial goals and avoid money problems.

reality bytes

Using Software
There are many software products on the market today designed to help you keep track of your personal finances. One of the first and most popular is Quicken®. Features allow you to track and pay bills and see if you have enough money to cover upcoming bills. You can also schedule bill payments and deposits.

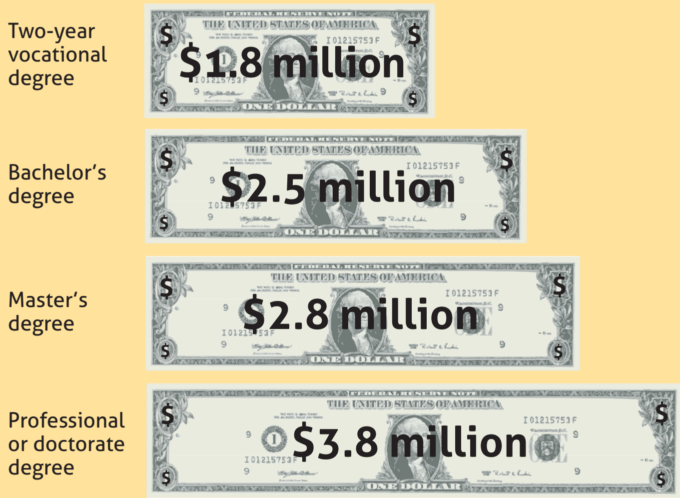
Economics and You

Opportunity Cost

An opportunity cost is what you give up to get something else. For example, the government makes decisions about how to spend taxpayers' money. A business owner may have to decide whether to keep profits or spend it on advertising. Keeping the profit may allow the owner to go on a vacation. However, advertising will help generate new customers and possibly more sales. Analysis of the cost and benefit of any action plays an important role in decision making.

Personal Finance Connection You will make many decisions that will require analysis of the costs and benefits. For example, should you use all of your savings to pay college tuition or should you take out a student loan and save your money for living expenses?

Critical Thinking How can opportunity costs be evaluated differently by different people? How do you think a group such as Congress may be challenged evaluating opportunity costs and trade-offs?



Source: www.collegeboard.com

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Activity Download an Economics and You Worksheet Activity.

After You Read

Predict Do you think financial planning strategies can help you achieve your goals? If yes, how? If no, why not?

6. **Invest** People invest for two main reasons: to increase their current income and to achieve long-term growth. To increase current income, you can choose investments that pay regular dividends or interest. To achieve long-term growth, you might choose stocks, mutual funds, real estate, and other investments that have the potential to increase in value in the future.
7. **Manage Risk** To protect your resources in case you are ever seriously injured, get sick, or die, you will need insurance coverage. Insurance will protect you and those who depend on you.
8. **Plan for Retirement** When you start to plan for retirement, consider the age at which you would like to stop working full time. You should also think about where you will want to live and how you will want to spend your time: at a part-time job, doing volunteer work, or enjoying hobbies or sports.

Developing and Using a Financial Plan

A good personal financial plan includes assessing your present financial situation, making a list of your current needs, and planning for future needs. You can design a plan on your own, hire a financial planner, or use a money-management software program. Making your financial plan work takes time, effort, and patience, but you will develop habits that will give you a lifetime of satisfaction and security.

Review Key Concepts

1. **Explain** What are the opportunity costs associated with personal financial decisions?
2. **Define** What is the time value of money?
3. **Identify** What are the eight strategies for achieving financial goals at different stages of life?

Higher Order Thinking H.O.T.

4. **Evaluate** A common piece of financial advice is "Do not live beyond your means." Explain the meaning of this statement. Do you think it is good advice? Why or why not?

English Language Arts

5. **Weighing Options** Maya is a part-time housekeeper at an assisted living facility, and she is about to graduate from high school. She needs to make a decision about the next step in her continuing education. She enjoys health care, and she is intrigued by the many commercials she sees on television for accelerated degree programs in medical assisting, occupational therapy, and other health care programs. However, these programs are expensive and she wants to keep her job. What are the personal and financial opportunity costs and benefits she faces if she pursues an accelerated degree program? Write your answer in the form of an email you are sending to Maya.

Mathematics

6. **Future Value of a Series of Deposits** Brittany is planning to purchase a house in 6 years. She wants to make a down payment of 15 percent at the time of purchase. She estimates that the purchase price of the house will be $200,000. Brittany is planning to invest $3,500 each year and will earn 8 percent interest annually in her account. What is Brittany's estimated down payment? How much will she have saved at the end of 6 years (use the table in **Figure 4**)? If she did not save enough, how much more will she need?

   Math Concept **Calculate the Future Value of a Series of Deposits** To calculate the future value of a series of deposits, you find the multiplying factor under the correct length of time and interest rate using the future value table.

   Starting Hint Identify the appropriate multiplying factor from the table in **Figure 4.** Multiply this factor by the annual deposit to determine the future value.

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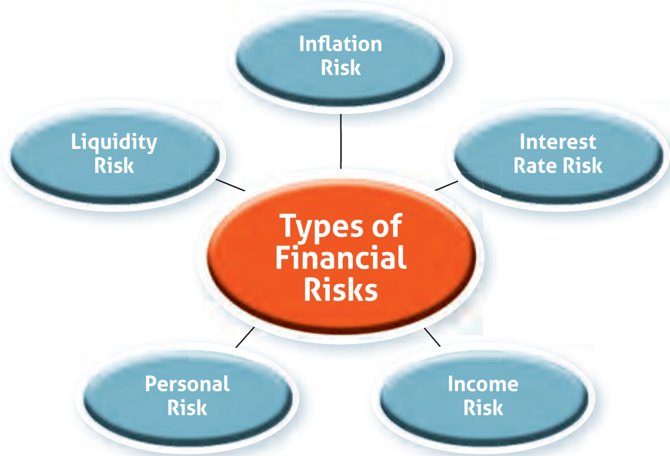
Visual Summary

Personal Financial Planning

Be Aware of the Risks

When you make certain financial decisions, you need to be aware of the potential risks associated with each decision you make.



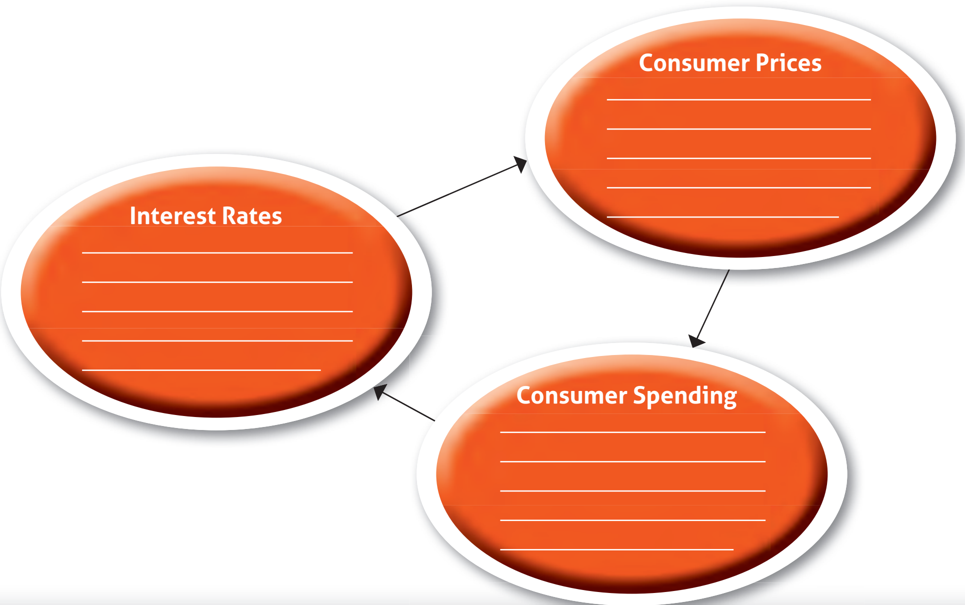
The Time Value of Money

When you understand how different types of deposits earn interest over time, you can make informed financial choices.

Concept	Definition
Future Value of a Single Deposit	The amount your original deposit will be worth in the future based on earning a specific interest rate over a specific period of time.
Future Value of a Series of Deposits	Annual interest made from a series of equal regular deposits.
Present Value of a Single Deposit	The amount of money you would need to deposit now in order to have a desired amount in the future.
Present Value of a Series of Deposits	Use present value calculations to determine how much money you would need to deposit so you can take a specific amount of money out of your savings account for a certain number of years.

Try It!

Draw a diagram like the one shown to illustrate the cycle of economic conditions. Use the blank lines to fill in details about each phase of the cycle.



Chapter Review and Assessment

Chapter Summary

- Personal financial planning means managing your money (spending, saving, and investing) so that you can achieve financial independence and security.
- The six steps of financial planning are
  - determine your current financial situation;
  - develop financial goals;
  - identify alternative courses of action;
  - evaluate alternatives;
  - create and use your financial plan of action;
  - review and revise your plan.
- The most important factors that influence personal financial planning are your life situations, your personal values, and outside economic factors.
- For all of your financial decisions, you must make choices and give up something. These opportunity costs, or trade-offs, can be personal or financial.
- The eight strategies for achieving your financial goals and avoiding money problems are: obtain, plan, spend wisely, save, borrow wisely, invest, manage risk, and plan for retirement.

Vocabulary Review

1. Use online or print resources to find an article on unemployment, inflation, interest rates, or the value of the U.S. dollar. Use at least eight of the terms below to write three paragraphs relating the information in the article to personal financial planning.

- personal financial planning
- goals
- values
- liquidity
- service
- good
- consumer
- interest
- time value of money
- principal
- future value
- annuity
- present value
- estimate
- consume
- weigh
- accumulate

Higher Order Thinking H.O.T.

2. Debate New and improved versions of electronic devices become available often. Detail arguments for and against upgrading each time a new device becomes available.

3. Examine Describe a situation in which a *need* for one person may be a *want* for a different person. Explain how this affects the financial decisions of each person.

4. Predict What factors might play a part in the revision of your financial plan as you get older?

5. Evaluate Consider three of your financial goals. Write them down, then outline how each goal meets the four guidelines for setting goals.

6. Justify Imagine that you are planning an investment for yourself. Would you choose stocks, mutual funds, real estate, or another type of investment? Justify your reasons.

7. Relate Interpret the phrase "spend money to make money" and explain how it relates to personal finance.

8. Pose Using the time value of money, write an argument in favor of shopping for a good interest rate.

9. Analyze What is the relationship between the timing of your goals and the type of good or service that you want?

College and Career Readiness

Social Studies

10. Global Community Imagine that you work as a medical billing and coding specialist for a large medical center. The center has started to outsource services, such as medical transcription, to a country where employees' wages are much lower than in the United States. As a result, the center is in the process of streamlining its record management systems. It also has allowed the center to reduce the number of employees who work in the front and back offices. Staff members believe that more jobs will be lost over the next two years. Using print or online resources, research the trend to outsource medical services to other countries. Based on your findings, would you consider finding another job? Explain your answer.

Mathematics

11. Present Value Randy wants to establish an account in the future where he can withdraw $1,000 per year for 8 years. His account earns 7 percent annual interest. How much money does Randy have to deposit today in order to achieve his goal? If his account only earns 5 percent annual interest, how much does he have to deposit today? If Randy decides that he only wants to withdraw $1,000 per year for 5 years, how much does he have to deposit today if the account earns 7 percent annual interest?

Math Concept **Calculate Present Value** To calculate the present value of a series of deposits find the multiplying factor using **Figure 4.**

Starting Hint To calculate the present value of a series of deposits first identify the appropriate present value factor from the table in **Figure 4.** Multiply this factor by the amount to be withdrawn.

English Language Arts

12. Set and Achieve a Goal Review the six steps of the financial planning process. Choose a specific, short-term financial goal that a typical teen might want to achieve, such as saving for a new cell phone or paying a debt. Using the six steps, create a detailed outline that shows how the teen can achieve this goal.

Economics

13. Economic Factors Inflation and interest rates are connected. Both of these economic factors should be considered in your financial planning, especially for long-term goals. Remember, inflation is the rise over time in the level of prices for goods and services. Inflation is measured as an annual percentage rate, like interest rates. Lower interest rates benefit consumers by giving them more borrowing power. When consumers spend more, the economy grows, and inflation is the natural outcome. Inflation, therefore, can be a sign of a healthy, growing economy. Explain why the Federal Reserve would consider raising interest rates during times of economic growth.

Real-World Applications

14. Opportunity Costs When T.J. graduated from high school, he received almost $1,600 in gifts from various family members, and he has about $600 saved from the two seasons he worked as a junior league hockey referee. His parents are urging him to put the money toward college, and his best friend thinks he should use it to get an apartment. Feeling independent and free, T.J. is eager to spend his money on new clothes, a new gaming system, and maybe some hockey equipment. He also needs new brakes for his car. With your teacher's permission, work in a small group to discuss how T.J. should spend his money. Consider the various financial opportunity costs and the time value of money. As a group, present your conclusion to the class in a brief oral report.

Getting Your Own Wheels

Are you dreaming of buying your own car? Olivia Johnson is. So far she has saved $3,000. Olivia has her eye on a used car that costs $9,000. Olivia figures she can afford a monthly car payment of no more than $200. Using the interest-rate table below, Olivia calculates the monthly payment needed to repay her car loan by multiplying the amount of the loan by the interest factor. She wants to pay off her loan in three years.

Olivia's Loan Story

Cost of car	$9,000.00
Less the down payment	– 3,000.00
Amount of loan	$6,000.00
Interest Rate of 8%	
Months	**Interest Factor**
12 (one year)	0.08698
24 (two years)	0.04522
36 (three years)	**0.03133**
48 (four years)	0.02441
Multiply loan amount by interest factor (0.03133) for 36 months	
$6,000 × 0.03133 = $187.98	

Olivia will pay $187.98 a month if she decides to borrow $6,000 for three years.

Calculate

Find an ad for a car you would like to buy. How much will it cost? Suppose you can afford 25 percent of the total price for a down payment. How much money will you need to borrow to pay for the car? On a separate sheet of paper, calculate how much money you will need for your monthly car payment. Calculate what your monthly payment will be if you paid off your loan in 1, 2, 3, and 4 years assuming an interest rate of 8 percent.

1. What is the total amount you will pay for your car if you pay it off in 1, 2, 3, and 4 years?
2. How much interest will you pay on your loan?
3. Which payment plan would enable you to pay the least amount of money for your car?
4. Which payment plan would have the lowest payments?