TEACHER'S GUIDE TO ACCOMPANY

UNDERSTANDING ECONOMICS



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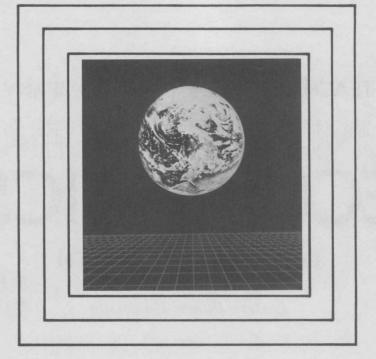
UNDERSTANDING ECONOMICS

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Text Design and Production: Dimensions and Directions Ltd.

Cover Design: Thomas Vroman Associates, Inc. Cover Photo: © Allen Lee Page, The Stock Market

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ISBN: 0-676-39896-0 Manufactured in the United States of America

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CONTENTS

INTRODUCTIO	N	1
UNIT 1 AN ECONOMIC OVERVIEW		
Chapter 1	Introduction to Economics	3
Chapter 2	The American Economy	6
Chapter 3	Demand, Supply, and the Interaction of Markets	9
	UNIT 2 THE AMERICAN BUSINESS STRUCTURE	
Chapter 4	Business Organization and Market Structures	14
Chapter 5	The Economics of the Firm: How Output and Profits Are Determined	18
Chapter 6	Labor Unions, Collective Bargaining, and Wage Determination	21
Chapter 7	Government and the Economy	25
	UNIT 3 ECONOMIC PERFORMANCE	
Chapter 8	Gross National Product: A Measure of the Nation's Economic Health	29
Chapter 9	Business Cycles, Unemployment, and Inflation	33
Chapter 10	Fiscal Policy, Budget Deficits, and the National Debt	37
	UNIT 4 MONEY, BANKING, AND MONETARY POLICY	
Chapter 11	Money and Banking	47
Chapter 12	The Federal Reserve System and Monetary Policy	44
	UNIT 5 PROBLEMS ON THE HOME FRONT	
Chapter 13	Income Distribution, Poverty, and Urban Problems	49
Chapter 14	Energy, Pollution, and the Environment	53
	UNIT 6 THE INTERNATIONAL PICTURE	
Chapter 15	International Trade and Finance	57
Chapter 16	Comparative Economic Systems and Problems of Developing Nations	61
	UNIT 7 PERSONAL ECONOMICS	
Chapter 17	Getting the Most for Your Money	66
Chapter 18	Borrowing and Investing	71
Decision-Ma	king Activities	75
Answers to Decision-Making Activities		94
Tests		99
Answers to T	Pests .	137

The Teacher's Guide to the Activities Resource Book can be found following page 154.

INTRODUCTION

High school courses in economics do much more than investigate how the economic system works; they aim at the goal of helping students forge linkages between economic issues and their own lives. *Understanding Economics* is designed to be a major tool in that effort.

The student textbook focuses on the following interrelated content areas: basic economic principles; the American business structure; economic performance; GNP and fiscal policy; money, banking, and monetary policy; problems on the home front; the international picture; and personal economics. In each area, the text stresses the active role of the individual and provides, whenever possible, practical techniques that students can use to relate economics to their own lives.

Understanding Economics is organized into seven units. Each unit consists of two to four chapters that are divided into sections. At the end of each chapter are chapter highlights, important terms, extending questions, activities, and an economics skills exercise. The sections within each chapter are followed by brief review questions that reinforce the major points covered in the text.

Understanding Economics is accompanied by three ancillary books: this Teacher's Guide, an Activities Resource Book, and a Teacher's Guide to the Activities Resource Book. Among them, they offer a wide range of teaching suggestions, activities, tests, and background information that will enable teachers to make the best possible use of the student textbook. Each book is described on the next page.

TEACHER'S GUIDE The contents of the Teacher's Guide are as follows:

Learning Objectives For each chapter in the student textbook, the Teacher's Guide provides a list of learning objectives. These distinguish for teachers the specific competencies students should acquire by studying the chapter.

Teaching Suggestions For each chapter in the student textbook, the Teacher's Guide provides a series of suggestions that give teachers ideas for highlighting certain topics in the text and that provide additional information about areas that may be of particular interest to students.

Textbook Answers The Teacher's Guide provides answers to Check Your Understanding—the review questions that appear throughout each chapter in the student textbook. In addition, it provides answers or suggested responses for these end-of-chapter exercises: Important Terms, Extending Your Understanding, Activities, and Applying Economics Skills.

Decision-Making Activities These activities provide one or more opportunities per unit for students to apply decision-making skills to economic problems. Problems range from the difficulties of finding teenage employment to the decisions that might be faced by a presidential adviser. This section is followed by suggested answers.

Tests Tests are provided for each chapter in the student textbook. Each test is divided into four segments: multiple choice, completion, matching, and essay questions. Test answers immediately follow the test section.

ACTIVITIES RESOURCE

The Activities Resource Book to accompany Understanding Economics is an optional text. It contains five activities per chapter, as well as two additional activities for each unit. The teacher can easily remove and duplicate them. The activities range in scope from simple exercises to some requiring problem-solving skills. Wherever possible, the activities are designed to tie in with students' own experiences and provide opportunities for decision making.

TEACHER'S GUIDE TO THE ACTIVITIES RESOURCE BOOK

This guide contains teaching suggestions and suggested answers for each activity.

UNIT 1 AN ECONOMIC OVERVIEW

CHAPTER 1 INTRODUCTION TO ECONOMICS

LEARNING OBJECTIVES

This chapter will enable students to

- understand that economics has wide-ranging effects on their lives
- explain why scarcity is the most basic economic problem
- give examples of limited resources and unlimited wants
- explain how the concept of opportunity cost operates in their own lives
- distinguish between economic goods and economic services
- describe how the four factors of production are combined to produce goods and services
- list the three basic economic questions facing every nation
- describe how traditional, command, and market economies answer the three basic economic questions

TEACHING SUGGESTIONS

You may find the following suggestions helpful for dealing with the material in this chapter:

• Encourage students to begin clipping articles relating to economics from newspapers or magazines and to bring them to class. Examples might include rising costs of goods and services, a change in the availability of natural resources, unemployment, and inflation. Post the articles on a bulletin board display that is updated regularly. In addition, you might require students to watch a television news program regularly and report on stories that deal with economic news. One of the main goals of the book is to encourage students to become aware of how economic issues continually affect their lives

and how the study of economics will enable them to understand these issues better. Finding examples from the local community and current national news should help make economics personal and relevant.

- Ask students to list several economic decisions that are made in their school. General topics could include the decision to purchase building supplies, setting the cost of athletic events and other school programs, decisions on lunchroom expenses and on regular expenses for students to attend school, expenditures for maintenance of the school building and grounds, and teacher and staff salaries. Students also should consider daily economic choices that involve allocation of time. For example, many students must choose between participating in regular after-school activities and part-time jobs.
- Have students consider the opportunity costs of various school-related economic choices. Examples could include proposals to purchase new school computers, to require an economics course for all students, to raise teacher salaries, and to increase the price of school lunches.
- Read the classified advertisements from a newspaper or magazine and have students determine if the ads are for economic goods or economic services.
- Invite an owner of a small business or a top executive from a local corporation to discuss his or her role as an entrepreneur. Students also could report on the successes and failures of entrepreneurs as profiled in current magazines.
- Have a group of students prepare a short skit on how the same economic question would be answered in a traditional, command, and market economy. An example might involve the need for a new tool or the desire for different foods.

ANSWERS TO CHECK YOUR UNDERSTANDING

Page 4

1. Define economics. How does economics affect your life?

Economics is the study of how individuals and society choose to use limited resources in an effort to satisfy unlimited wants. Examples given by students should mention either limited resources, their unlimited wants, or how they must make economic choices.

2. Why is scarcity the most basic of all economic problems?

Nations, businesses, and people are all continually faced with the problem that there are not enough resources for them to get everything they want. Everyone must continually make difficult choices. If there were enough resources for everyone to get what he or she wanted, there would be no choices and no economic problems.

3. What is meant by the term "opportunity cost"? How do opportunity costs affect both individuals and nations?

Opportunity cost is the cost of the next best alternative, given up when a decision is made to use resources in a particular way. Both people and nations must make decisions about how to allocate their resources, including money and time.

Page 6

1. What is an economic good? What is an economic service? Give some examples of each.

Economic goods are things of value that you can see, touch, and show to others. Examples could include such items as food and clothing, as well as factories, stores, machines, and tools.

Economic services are intangible things that have value but often cannot be seen, touched, or shown to others. Examples could include medical care, legal advice, movies, and national defense.

2. Define each of the four factors of production. How must these factors be combined for the production of goods and services?

The four factors of production are

1. Natural resources, or things provided by nature;

- 2. Capital goods, or human-made resources that are used for the production of other goods and services;
- 3. Labor, or any form of human effort exerted in production;
- 4. Entrepreneurship, or the function of combining and organizing the natural resources, capital goods, and labor.

Production of goods and services requires natural resources as a starting point, capital goods to turn natural resources into useful products, labor to put to use the natural resources and capital goods, and entrepreneurship to combine and organize the natural resources, capital goods, and labor.

3. Why is entrepreneurship such an important factor of production?

Natural resources, capital goods, and labor may all be available but without entrepreneurship, goods and services cannot be produced. Someone must be willing to assume the risk of business failure and provide the creative and managerial skills for production to take place.

Page 10

1. What are the three basic economic questions that every nation must answer? What are some of the things that nations must consider when answering these questions?

The three basic economic questions are

- 1. What goods and services shall be produced?
- 2. How shall goods and services be produced?
- 3. For whom shall goods and services be produced?

Nations must consider what kinds of goods and services to produce. Will luxury goods be produced or just basic necessities? Once that decision is made, how will these goods and services be produced? Will goods and services be produced by a large number of workers using simple machines or by a small number of workers using complex machines? Finally, a nation must have a method for deciding who gets the goods and services produced. Should everyone get an equal share or should some people get more goods and services than others?

2. What are the three basic kinds of economic systems? What are the characteristics of each?

The three basic economic systems are traditional economies, command economies, and market

economies. *Traditional economies* are usually found in rural, nonindustrial areas of the world, often centered around a family or tribal unit. Each unit produces most of its own goods and consumes everything it produces.

In *command economies*, the basic economic questions are answered by government officials. The government engages in detailed planning to produce and distribute goods and services. The government usually owns the natural resources and capital goods.

In *market economies*, the basic economic questions are answered by individual households and businesses through a system of freely operating markets. Usually natural resources and capital goods are privately owned.

3. What is a market? How do buyers and sellers send signals to one another in a market economy?

A *market* is an arrangement through which potential buyers and sellers come together to exchange goods and services. Buyers send signals to sellers through a system of freely operating markets. Buyers signal sellers to increase or decrease production of certain items by purchasing more or less of these items.

4. What is a mixed economy? How do mixed economies differ from one another?

A *mixed economy* is a mixture of a command economy and a market economy. In some economies, such as that of the United States, most of the economic decisions are made by individual households and businesses. In other economies, such as that of the Soviet Union, the government makes most of the economic decisions.

ANSWERS TO END-OF-CHAPTER QUESTIONS

Important Terms

- 1. Economics
- 2. Entrepreneurship
- 3. Factors of production
- 4. Economic model
- 5. Traditional economies
- 6. Economic services
- 7. Consumer goods
- 8. Labor
- 9. Scarcity
- 10. Opportunity cost

- 11. Economic system
- 12. Natural resources
- 13. Capital goods
- 14. Command economies
- 15. Market economies
- 16. Economic goods
- 17. Market
- 18. Mixed economies

Extending Your Understanding

1. Imagine a world without the problem of scarcity—a world where nobody had to work and where people could have everything they wanted free of charge. Do you think you would enjoy living in such a world? Why or why not?

Students who favor a world without scarcity might note that there would be no poverty or hunger. People would have time to do whatever they wanted since work would not be required. Students who are opposed to such a world might note that competition for scarce resources has led to important scientific and technological developments, as well as to many of the consumer items now available. Many people also enjoy the challenge of succeeding at productive work.

2. Try to think of several important decisions that you have made recently. What was the opportunity cost of each decision? Do you think that the opportunity cost of any of your decisions was too high?

Student decisions could involve choices about spending money for various products or services, or spending time on various activities. The opportunity costs would be the next best alternative product or service they could not buy or the activity they gave up. In some cases, the choice will be an easy one for students to make, but in other cases the opportunity costs may pose very difficult choices.

3. Why is it so important for you and other students to learn about economics?

Learning about economics is important for Americans since the basic economic decisions in the United States are made by individual households and businesses and by a government that consists of elected representatives.

Activities

1. Over the course of an afternoon, keep a record of your thoughts and activities. Then explain how each is related to economics.

Student explanations could show how their thoughts and activities involve the problem of scarcity and opportunity costs. Examples should illustrate how limited resources and unlimited wants play a role in their thoughts and activities.

2. Read a newspaper or a news magazine for a week. Then, based on what you read, write a short report called "Economics in the News."

Students might use examples from the news to illustrate the basic economic concepts introduced in this chapter. Examples could illustrate a traditional, command, or market economy at work; how scarcity creates problems for a person, business, or nation; what opportunity costs are involved in a decision; or how the four factors of production are put to use.

Applying Economics Skills

1. What is the most frequent source of the evening meal for the 2,000 suburban residents?

Fast-food restaurants are the most frequent source.

2. What is the least frequent source of the evening meal for these residents?

Specialty restaurants are the least frequent source.

3. How many of these residents routinely do *not* eat at home?

Seventy percent, or 1,400, of these residents routinely do not eat at home.

4. If last year 725 residents ate at fast-food restaurants and only 20 ate at specialty restaurants, which type of restaurant is growing faster?

Specialty restaurants are growing faster.

CHAPTER 2 THE AMERICAN ECONOMY

LEARNING OBJECTIVES

This chapter will enable students to

- understand that the American economy is predominantly a capitalist economy and a market economy
- describe how competition and the price system enable the "invisible hand" to function in the American economy
- describe the components of a pure market economy
- list and describe the three major roles government plays in the American economy
- describe how the American economy answers the three basic economic questions
- describe the principle of "consumer sovereignty" and how it affects production

differences exist. In some cases, it may be necessary to call companies to find out starting salaries.

- Have students think about how big a role the government plays in their community. In some cities in the United States, the government is the single biggest employer. Make a list of some government businesses or occupations in the local community. Are there other businesses that depend on government contracts for a high percentage of their work?
- Encourage students to think of other examples in addition to the Edsel that have demonstrated the power of consumer sovereignty. Have students consider products that seem to them to have been "surprise" failures and "surprise" successes.

TEACHING SUGGESTIONS

You may find the following suggestions helpful for dealing with the material in this chapter:

- Encourage students to watch a television news program and keep track of the economic issues that are reported.
- Have students assess the impact of competition on the job market in their community. They can study the want ads to determine starting salaries in different job markets and discuss why these

ANSWERS TO CHECK YOUR UNDERSTANDING

Page 20

1. What is meant by the "invisible hand" principle?

The "invisible hand" principle is the ability of the American economic system to determine the production and distribution of goods and services without centralized planning.

2. How does this principle operate to make sure that the proper combination and quantity of goods and services are available at the right place and time?

Businesses usually attempt to maximize profits. In order to accomplish this, they must make sure that their goods and services are available when and where consumers want them. At the same time, consumers act in ways to maximize satisfaction per dollar spent and convey their desires to businesses.

Page 21

1. How does competition enable the invisible-hand principle to work?

Competition creates economic rivalry among sellers, buyers, workers, and employers. Competition keeps sellers of goods and services from charging excessively high prices and allows individuals to make choices.

2. How does competition in the job market benefit both employers and employees?

Competition for jobs tends to provide employers with better qualified employees. Competition between employers tends to provide employees with higher earnings and better working conditions.

Page 24

1. What is the price system? Why is it referred to as the basic coordination and communication system of a market economy?

The *price system* is the mechanism by which producers and consumers transmit information about production to one another. It is referred to as the basic coordination and communication system of a market economy because it helps producers make production decisions and thereby keeps the economy in balance.

2. How are messages communicated between buyers and sellers in a pure market economy? Between employers and employees?

When buyers of an item buy more of it, the price of the item will rise. This sends a message to the producers to produce more of the item. When consumers buy less of an item, the price falls and producers make less of the item.

In the job market, if there are too many workers in a particular occupation, wages will tend to fall. As a result, fewer people will enter that occupation, and the surplus of workers eventually will

be eliminated. If there is a shortage of workers, wages will tend to rise as employers compete with one another for the scarce workers. This will tend to encourage more people to enter the occupation.

3. Can you describe the four characteristics of pure competition?

The first characteristic is many sellers. There would be many sellers in each market, and each seller would have to accept the going market price of the product.

The second characteristic is a standardized product. Products would be so similar that consumers couldn't distinguish among them.

The third characteristic is easy entry into and exit from the market. New firms would be able to sell their products as easily as could long-established firms.

The fourth characteristic is no artificial restrictions on the free movement of prices and wages. There would be no government wage and price controls, no minimum wage laws, no labor unions, and so on.

4. How does the American economy differ from a pure market economy?

First, there are many areas of production controlled by a few giant business firms; that is, there are few sellers for some goods and services. Second, in many fields, products are not standardized. Third, easy entry into and exit from many fields is prevented because a few firms own all or most of the resources. Finally, government restrictions do exist.

Page 28

1. In what ways does the government intervene in the American economy?

The government intervenes by enforcing rules, producing and distributing collective goods and services, and regulating the price and quality of some goods and services.

2. What are collective goods and services? What role does the government play in the production and distribution of national defense, highways, and the public schools?

Collective goods and services are items that tend to benefit large numbers of people collectively and would not be available to everyone if each individual had to provide them. The government collects taxes to pay for national defense, highway construction and maintenance, and public education. The government is responsible for providing each of these collective goods.

3. Why does the government regulate the services and prices in some areas of the economy?

For the production of some goods and services, it is assumed that competition is less efficient than government intervention.

Page 32

1. How is the question "What shall be produced?" answered in the American economy?

This question is answered partly through government and partly through consumer spending. Elected representatives bid for some of the nation's limited resources for national defense and other government services. The remaining resources are used to produce capital goods and consumer goods and services. The specific types and quantities of goods and services produced are determined by consumers through their purchases.

2. What is meant by the term "consumer sovereignty"? How was consumer sovereignty responsible for the failure of the Edsel?

Consumer sovereignty is the process of allowing people to make the decision about what consumer goods and services shall be produced. In the Edsel case, people failed to "vote" with their dollars for the Edsel, and the car was taken off the market.

3. How is the question "How shall goods and services be produced?" answered in the American economy?

The answer to this question is determined by competition through the price system. Basically, the least cost, most efficient method of production must be used by those businesses faced with a substantial degree of competition.

4. How is the question "For whom shall goods and services be produced?" answered?

Generally, goods and services are distributed by the American economic system on the basis of dollar votes. Those people with the most dollars receive the most goods and services. However, a number of government and private charity programs help those with little or no income receive some goods and services.

ANSWERS TO END-OF-CHAPTER QUESTIONS

Important Terms

- 1. Invisible-hand principle
- 2. Competition
- 3. Price system
- 4. Collective goods
- **5.** Consumer sovereignty
- 6. Capitalism
- 7. Profit motive
- 8. Profit

Extending Your Understanding

1. Why is competition so important in the American economy? Give some examples of businesses in your community that have little or no competition. Would the interests of your community be better served if these businesses had more competitors?

Students should discuss the role competition plays in allowing the invisible-hand principle to operate. Competition prevents sellers from charging excessively high prices and helps ensure that consumers will get the product they need at the lowest price. Competition also enables workers to receive higher wages and provides employers with better qualified workers.

Examples of businesses in your community with little or no competition will likely include public utilities, among others. Communities usually benefit from lack of competition among utility companies since several competing firms would have fewer customers and would have to charge a much higher price for services. In some communities, a single business might dominate the retail market.

2. Do you think American consumers always make wise decisions when they vote in the marketplace with their dollars? Why or why not?

Students may cite examples of what they consider to be good or "wise" consumer decisions and those that do not seem as good. Responses should note that regardless of the outcome, a key aspect of the American economy is that consumers have the power to exercise their "vote" in the market-place.

3. Some people have argued that in order to protect the American automobile industry, the government should restrict the import of foreign cars. What arguments can be made for and against such government intervention?

Answers should note that restricting imports would reduce the number of foreign cars in the American market and/or increase their price. This should result in the purchase of more American-made cars, thus employing more people in the auto industry. This move could be supported under the government's goal of helping protect American workers. One argument against import restrictions is that since cheaper imports may not be available, Americans may have to pay more for the cars they buy. People who favor less government intervention in the marketplace often oppose trade restrictions.

Activities

1. Suppose you are the manager of a new clothing boutique that has just opened in your neighborhood. Prepare a strategy on how you would try to ensure the store's success.

Topics the strategy could cover include how the new store would try to price its merchandise at a competitive level, how it would respond to changes in consumer demands, how the employer would attract employees by offering competitive salaries and other benefits, and how it would comply with any government regulations.

2. With one student playing the role of a career counselor and another playing the role of a college student, prepare a short skit on factors to consider when choosing a career and looking for a job.

The skit should cover job prospects in particular occupations, the number of potential candidates, and why salaries might differ from one geographical area to another and from one occupation to

another. The skit should demonstrate that prospective employees benefit when there are many firms trying to hire a few qualified applicants but that prospective employees are likely to receive fewer benefits when there are a great many applicants competing for the same job.

Applying Economics Skills

1. In general, how did the sales of all three businesses progress from April through July? Which company had the highest weekly sales in July? How many cones did it sell each week?

Sales increased from April through July. Fun Cones had the highest weekly sales in July, selling 600 cones a week.

2. At the beginning of August, Fun Cones decided to raise its price ten cents a cone. Did sales increase or decrease during August? Did sales of the other two businesses increase or decrease during this same period? What effect did Fun Cones's price increase appear to have on sales?

The sales of Fun Cones decreased in August, while the sales of Cone Carnival and Double Dip increased. The Fun Cones's price increase appears to have increased sales at the other two stores.

3. What kind of a change in sales did all three businesses experience between August and September? What might account for this change?

Sales decreased in September, possibly due to the fact that summer vacations ended and school resumed, or possibly due to the weather becoming cooler.

CHAPTER 3 DEMAND, SUPPLY, AND THE INTERACTION OF MARKETS

LEARNING OBJECTIVES

This chapter will enable students to

- explain the meaning of the word "demand" and state the law of demand
- explain the meaning of the word "supply" and state the law of supply
- describe how supply and demand interact to determine price and what happens when prices are above or below the equilibrium price
- describe how changes in demand or supply affect price
- explain how government-imposed price ceilings

- and price floors create shortages and surpluses
- use the concept of elasticity to predict changes in quantity demanded and quantity supplied of consumer items
- explain the relationship between markets for consumer products and markets for productive resources

TEACHING SUGGESTIONS

You may find the following suggestions helpful for dealing with the material in this chapter:

- As students read this chapter, encourage them to think about the question of why certain products cost what they do. You might ask students to list a few consumer items they have purchased or want to purchase. Have them read the chapter for clues about why certain prices exist for these products.
- Review the concepts of supply and demand and help students distinguish between everyday uses of these terms and their specific economic meanings. Review the laws of supply and demand and provide a number of hypothetical situations to evaluate and reinforce student understanding.
- Bring in stories from newspapers or magazines that would likely lead to a change in demand or supply of a good or service. These might include stories about OPEC meetings, winter storms that affect food supply, or new technology. Encourage students to bring in similar articles and to watch or listen to news programs for other examples.
- Have students reflect on how changing population patterns in this country affect demand. Use
 the recent increase in birth rates and the general aging of the population as examples and
 speculate on their potential effect on the demand for certain goods and services.
- Have students discuss their response to changing prices of consumer items they purchase.
 Demonstrate the substitution effect by asking students when and why they buy substitute products for their regular brands.

ANSWERS TO CHECK YOUR UNDERSTANDING

Page 43

1. How is the word "demand" used in economics?

Demand refers to the ability and willingness of people to buy things.

2. State the law of demand.

As the price of an item rises and other factors remain unchanged, the quantity demanded by buyers will fall; as the price of an item falls and other factors remain unchanged, the quantity demanded by buyers will rise.

3. What is meant by the income and substitution

effects? Give examples to show how these two principles operate.

The *income effect* occurs when the price of any item declines and people can buy more of it out of a given income. For example, if the price of chicken falls from \$2 a pound to \$1 a pound, a person can buy twice as much chicken at the lower price as he or she can at the higher price.

The tendency for consumers to substitute lower priced items for more expensive items is the *substitution effect*. For example, when chicken prices are higher than fish prices, a person may substitute fish for chicken.

4. Explain the principle of diminishing marginal utility. Give an example of this principle.

As an individual obtains more and more units of an item during a specified time period, he or she will obtain less and less additional utility or satisfaction from each additional unit. For example, the third or fourth fruit cup you eat will bring you less satisfaction than the first or second one. Even if the price is reduced for the fourth or fifth fruit cup, you probably would not buy it.

5. What is the difference between demand and quantity demanded?

Demand refers to the entire demand schedule or the whole schedule of possible prices and quantities demanded. Quantity demanded refers to a specific quantity demanded at a specific price.

6. What factors can lead to a change in demand?

Changes in demand can result when the income of consumers rises or falls, when general attitudes and tastes of consumers change, and when the availability and prices of substitute and complementary items change.

Page 45

1. How is the word "supply" used in economics?

Supply refers to the ability and willingness of sellers to make things available for sale.

2. State the law of supply.

As the price of an item rises and other factors remain unchanged, the quantity supplied by suppliers will rise; as the price of an item falls and other factors remain unchanged, the quantity supplied by suppliers will fall.

3. What is the difference between supply and quantity supplied?

The term *supply* refers to the whole schedule of possible prices and quantities supplied. *Quantity supplied* is a specific quantity supplied at a specific price.

4. What factors can cause a change in supply?

A change in supply can occur when the costs of production change or, in the case of farm products, when weather affects the supply.

Page 48

1. What is a market? Give examples of local, national, and worldwide markets.

A *market* is an arrangement through which potential buyers and sellers come together to exchange goods and services. An example of a local market is a farmers' market. A national market exists for professional athletes and coaches. A worldwide market exists for gold, silver, crude oil, and many other products where buyers and sellers interact on an international scale.

2. How do supply and demand determine prices?

Supply and demand work together to determine prices. The price of any item will tend to move toward the price at which the quantity demanded is exactly equal to the quantity supplied.

3. What is an equilibrium price? How is it achieved?

The *equilibrium price* of any item is that price at which the quantity demanded is exactly equal to the quantity supplied. It is the point on a graph where the demand and supply curves cross. The equilibrium price is achieved by the free movement of prices up or down.

4. What happens when prices are too high for equilibrium?

When prices are higher than the equilibrium price, a surplus results. In this situation, the price of the surplus item will fall until the surplus has been eliminated.

5. What happens when prices are too low for equilibrium?

When prices are lower than the equilibrium price, a shortage results. In this situation, the price of the item will tend to rise until the shortage is eliminated.

Page 53

1. How does an increase in demand affect price? A decrease?

An increase in demand usually will cause the equilibrium price to rise. A decrease in demand usually lowers the equilibrium price.

2. How does an increase in supply affect price? A decrease?

An increase in supply usually will lower the equilibrium price. A decrease in supply usually will raise the equilibrium price.

3. What is a price ceiling? A price floor? When are such forms of government intervention used?

Price ceilings are government-imposed regulations that prevent prices from rising above a certain maximum level. Price floors are government-imposed regulations that prevent prices from falling below a certain minimum level. Price ceilings are used by the government in times of rapidly rising prices to halt price increases. Price floors are used to prevent the prices of certain products, such as farm products, from falling below the cost of production.

4. What is meant by elasticity of demand and elasticity of supply? Give examples of very elastic and very inelastic commodities.

Elasticity of demand is a measure of the responsiveness of quantity demanded to a change in price. If a change in the price of an item will have little effect on the quantity demanded, the demand for that item is very *inelastic*. If a change in price has a large effect on the quantity demanded, the demand is very elastic.

Elasticity of supply is a measure of the responsiveness of quantity supplied to a change in price. If a change in price will have a very large effect on the quantity supplied, the supply of that item is very elastic. However, if a change in price has little effect on the quantity supplied, the supply is very inelastic.

The demand for salt, milk, sugar, and medicine is very inelastic. The demand for bubble bath and other luxury items is very elastic.

5. What determines elasticity of demand and supply?

Elasticity of demand is determined by whether an item is considered a necessity, how expensive an item is relative to consumers' total expenditures,

and the availability and cost of good substitutes.

Elasticity of supply depends largely on the time period under consideration. When it takes a short time for producers to react to a change in price by adjusting the supply, supply is elastic. When it takes a long time for producers to react to a change in prices, supply is inelastic.

Page 56

1. How does the "ripple effect" affect markets in the American economy?

A change in demand or supply in one market will set off a series of changes in demand or supply that will affect many other markets. For example, an increase in the demand for new houses will increase the demand for carpenters, bricklayers, plumbers, electricians, lumber, concrete, bricks, glass, and so on.

2. Distinguish between markets for consumer products and markets for productive resources.

Markets for consumer products are those markets in which households are the buyers and businesses are the sellers of consumer goods and services. Markets for productive resources are those markets in which businesses are the buyers and, to a large extent, households are the sellers of productive resources.

3. Explain the circular flow of economic activity.

The circular flow of economic activity explains the relationship between markets for consumer products and markets for factors of production. Money flows from households to businesses to pay for goods and services and from businesses to households to pay for factors of production. At the same time, goods and services are moving from businesses to households and factors of production are moving from households to businesses.

ANSWERS TO END-OF-CHAPTER QUESTIONS

Important Terms

- 1. Supply schedule
- 2. Law of demand
- 3. Demand schedule
- 4. Law of supply
- 5. Market
- 6. Demand7. Income effect
- 8. Demand curve
- 9. Supply

- 10. Equilibrium price
- 11. Price ceiling
- 12. Price floor
- 13. Quantity demanded
- 14. Quantity supplied
- 15. Elasticity of demand
- 16. Elasticity of supply
- 17. Principle of diminishing marginal utility
- 18. Substitution effect
- 19. Supply curve
- 20. Ripple effect

Extending Your Understanding

1. Under what circumstances do you think the government might be justified in imposing price controls on the American economy? What kinds of problems would be created by price controls?

The government might impose price ceilings when it seemed necessary to help control rising prices, or price floors to keep the prices of some items from falling too low. Students may suggest specific instances where price ceilings may be necessary (as in the attempt to keep gasoline prices low) or where price floors are needed (such as to help farmers meet the costs of production).

Price ceilings create shortages of products since the quantity demanded at the ceiling price will exceed the quantity supplied. Price floors create surpluses of products because at the established price, the quantity supplied will exceed the quantity demanded.

2. Suppose an increase in the birthrate leads to a substantial increase in the number of students enrolled in the nation's schools. What markets would be affected by this development? How would they be affected?

Several markets would be affected by an increase in public school enrollment. These would include an increased demand for teachers and other school employees, school supplies, school buildings, school clothes, school buses, and other education-related products and services. In addition, there would be an increased demand for other goods and services related to the rising numbers of young children, including pediatricians, children's clothes, day-care centers, larger cars, and so on.

Activities

1. To explore how the laws of supply and demand operate, ask several merchants in your community how they decide which items to order, how many of the items to order, what prices to