CHAPTER 14

Planning Guide

Key to Ability Levels	
BL Below level	AL Above level
OL On level	ELL English Language Learners

Key to Teaching Resources	
Print Material	DVD
CD-Rom	Transparency

Levels				Resources	Chapter Opener	Section 1	Section 2	Section 3	Chapter Assess
BL	OL	AL	ELL						
				FOCUS					
BL	OL	AL	ELL	Daily Focus Skills Transparencies		58, 60, 61	31, 59	62, 63, 79	
				TEACH					
BL	OL		ELL	Guided Reading Activities*		p. 40	p. 41	p. 42	
BL	OL	AL	ELL	Economic Content Vocabulary Activities*		p. 14	p. 14	p. 14	
	OL	AL		Critical Thinking Activities		p. 16		p. 20	
BL	OL		ELL	Reading Essentials and Note-Taking Guide*		p. 118	p. 121	p. 124	
		AL		Enrichment Activities			p. 14		
	OL	AL		Free Enterprise Activities				pp. 20, 21	
BL	OL	AL	ELL	Primary and Secondary Source Readings		p. 16	p. 31		
BL	OL	AL	ELL	Economic Cartoons			p. 20	p. 25	
BL	OL	AL	ELL	Economic Concepts Transparencies, Strategies, and Activities		p. 11	p. 9	p. 35	
BL	OL	AL	ELL	Math Practice for Economics			p. 9		
BL	OL	AL	ELL	Economic Forms and Financial Pages Transparencies, Strategies, and Activities		pp. 5, 24	p. 5		
BL	OL	AL	ELL	Personal Finance Activities		p. 1			
BL	OL	AL	ELL	Reinforcing Economic Skills			p. 3		
BL	OL		ELL	High School Reading in the Content Area Strategies and Activities	✓	✓	✓	✓	✓
BL	OL	AL	ELL	High School Writing Process Transparencies	✓	✓	✓	✓	✓
BL	OL	AL	ELL	Writer's Guidebook	✓	✓	✓	✓	✓
BL	OL	AL	ELL	StudentWorks Plus CD-ROM	✓	✓	✓	✓	✓
BL	OL	AL	ELL	Vocabulary PuzzleMaker CD-ROM	✓	✓	✓	✓	✓

*Also available in Spanish

TeacherWorks Plus
All-In-One Planner and Resource Center

- Interactive Lesson Planner
- Interactive Teacher Edition
- Fully editable blackline masters
- Economics & You videos
- Differentiated Lesson Plans
- Printable reports of daily assignments
- Standards tracking system

Levels BL	OL	AL	ELL	Resources	Chapter Opener	Section 1	Section 2	Section 3	Chapter Assess
TEACH *(continued)*									
BL	OL	AL	ELL	**Economics & You Video Program DVD—*Money and Banking***	✓	✓	✓	✓	✓
BL	OL	AL	ELL	**Graph Coach CD-ROM**	✓	✓	✓	✓	✓
Teacher Resources				**Differentiated Instruction Strategies**	✓	✓	✓	✓	✓
				Success with English Learners	✓	✓	✓	✓	✓
				Presentation Plus! CD-ROM	✓	✓	✓	✓	✓
ASSESS									
BL	OL	AL	ELL	**Section Quizzes and Chapter Tests**		p. 173	p. 174	p. 175	pp. 177, 181
BL	OL	AL	ELL	**Authentic Assessment Strategies and Activities**		p. 16			
BL	OL	AL	ELL	***ExamView® Assessment Suite* CD-ROM**		14-1	14-2	14-3	Ch. 14
BL	OL	AL	ELL	**Interactive Tutor Self-Assessment CD-ROM**		14-1	14-2	14-3	
CLOSE									
BL			ELL	**Reteaching Activities***		p. 14	p. 14	p. 14	
BL	OL		ELL	**Reading and Study Skills Foldables**		p. 58	p. 58	p. 62	
BL	OL	AL	ELL	**Graphic Organizer Transparencies**		p. 11		p. 33	

*Also available in Spanish

Activity: Using the Glencoe Web Site

Vocabulary eFlashcards

Technology Product

The Vocabulary eFlashcards on the Glencoe Web site enable students to review vocabulary and their definitions for each chapter. The Vocabulary eFlashcards provide separate card sets for content vocabulary and academic vocabulary, and a separate set for people, places, and events, along with textbook page references. The final set combines all words and terms. Students can print sets of card to review vocabulary away from the computer.

Objectives

The Vocabulary eFlashcards help students

- practice and reinforce their comprehension of vocabulary and key terms in each chapter;
- identify areas for additional study and reinforcement.

Steps

Provide students with the following steps to work with the Vocabulary eFlashcards:

- Locate the Web page for the textbook being studied on the Glencoe Web site glencoe.com.
- Click on **Student Center** under the textbook title.
- In the Student Center, select a unit from the Unit Resources menu and a chapter from the Chapter Activities menu using the drop-down arrows.
- Click on the **Vocabulary eFlashcards** link.
- Select and review one of the vocabulary lists for the chapter: Academic; Content; People, Places, Events; or Combined. A new window will open.
- Review vocabulary in one of the three viewing modes: View Terms and Definitions, View Terms, and View Definitions. Click on **Flip Card** to read the relevant term or definition.

Economics ONLINE

	Student	Teacher	Parent
Beyond the Textbook	●	●	●
Chapter Overviews	●	●	●
ePuzzles and Games	●		●
Concepts in Motion	●		●
Multi-Language Glossaries	●		●
Online Student Edition	●	●	●
Self-Check Quizzes	●		●
Student Web Activities	●		●
Study Central™	●		●
Time Current Events	●	●	●
Teaching Today		●	
Vocabulary eFlashcards	●		●
Web Activity Lesson Plans		●	

Glencoe Media Center

› glencoe.com

Study-To-Go

- Vocabulary eFlashcards
- Self-Check Quizzes

› **Audio/Video**

- Student Edition Audio
- Spanish Summaries
- Economics & You Videos

Additional Chapter Resources

Reading Support From Jamestown Education

- **Timed Readings Plus in Social Studies** helps students increase their reading rate and fluency while maintaining comprehension. The 400-word passages are similar to those found on state and national assessments.
- **Reading in the Content Area: Social Studies** concentrates on six essential reading skills that help students better comprehend what they read. The book includes 75 high-interest nonfiction passages written at increasing levels of difficulty.
- **Reading Social Studies** includes strategic reading instruction and vocabulary support in Social Studies content for both ELLs and native speakers of English. www.jamestowneducation.com

Reading List Generator CD-ROM — Glencoe BookLink 3

Use this database to search more than 30,000 titles to create a customized reading list for your students.

- Reading lists can be organized by students' reading level, author, genre, theme, or area of interest.
- The database provides Degrees of Reading Power™ (DRP) and Lexile™ readability scores for all selections.
- A brief summary of each selection is included.

Leveled reading suggestions for this chapter:

For students at a Grade 10 reading level:

- ***From Seashells to Smart Cards: Money and Currency,*** by Ernestine Giesecke

For students at a Grade 11 reading level:

- ***Money Business: Banks and Banking,*** by Ernestine Giesecke

For students at a Grade 12 reading level:

- ***The House of Morgan: An American Banking Dynasty and the Rise of Finance,*** by Ron Chernow

* Review suggested books before assigning them.

NCEE

National Council on Economic Education

Voluntary Standards Emphasized in Chapter 14

Content Standard 11 Money makes it easier to trade, borrow, save, invest, and compare the value of goods and services.

Content Standard 12 Interest rates, adjusted for inflation, rise and fall to balance the amount saved with the amount borrowed, which affects the allocation of scarce resources between present and future uses.

Content Standard 20 Federal government budgetary policy and the Federal Reserve System's monetary policy influences the overall levels of employment, output, and prices.

Resources Available from NCEE

- Virtual Economics®: An Interactive Center for Economic Education Version 3.0
- Civics and Government: Focus on Economics, Second Edition
- Focus: High School Economics, Second Edition
- Advanced Placement Economics: Teacher Resource Manual, Third Edition
- Focus: Understanding Economics in U.S. History

To order these materials, or to contact your State Council on Economic Education about workshops and programs, call 1-800-338-1192 or visit the NCEE Web site at store.ncee.net.

The BIG Idea

As students study the chapter, remind them to consider the chapter-based Big Idea. The **Essential Question** in the chapter launch activity below ties in to the Big Idea and helps students think about and understand important chapter concepts. In addition, the Hands-On Chapter Project relates the content from each section to the Big Idea. The steps in each section build on each other and culminate in the Wrap-Up Activity on the Visual Summary page.

Economics & You Video To generate student interest and provide a springboard for class discussion, access the Economics & You Topic 17 video, **Money and Banking,** at glencoe.com or on the video DVD.

FOLDABLES Study Organizer **Dinah Zike's Foldables** are three-dimensional, interactive graphic organizers that help students practice basic writing skills, review key vocabulary terms, and identify main ideas. Have students complete this chapter's Foldable activity or activities in *Dinah Zike's Reading and Study Skills Foldables* booklet. **OL**

Economics ONLINE

Introduce students to chapter content and key terms by having them access *Chapter 14—Chapter Overviews* at glencoe.com.

CHAPTER 14

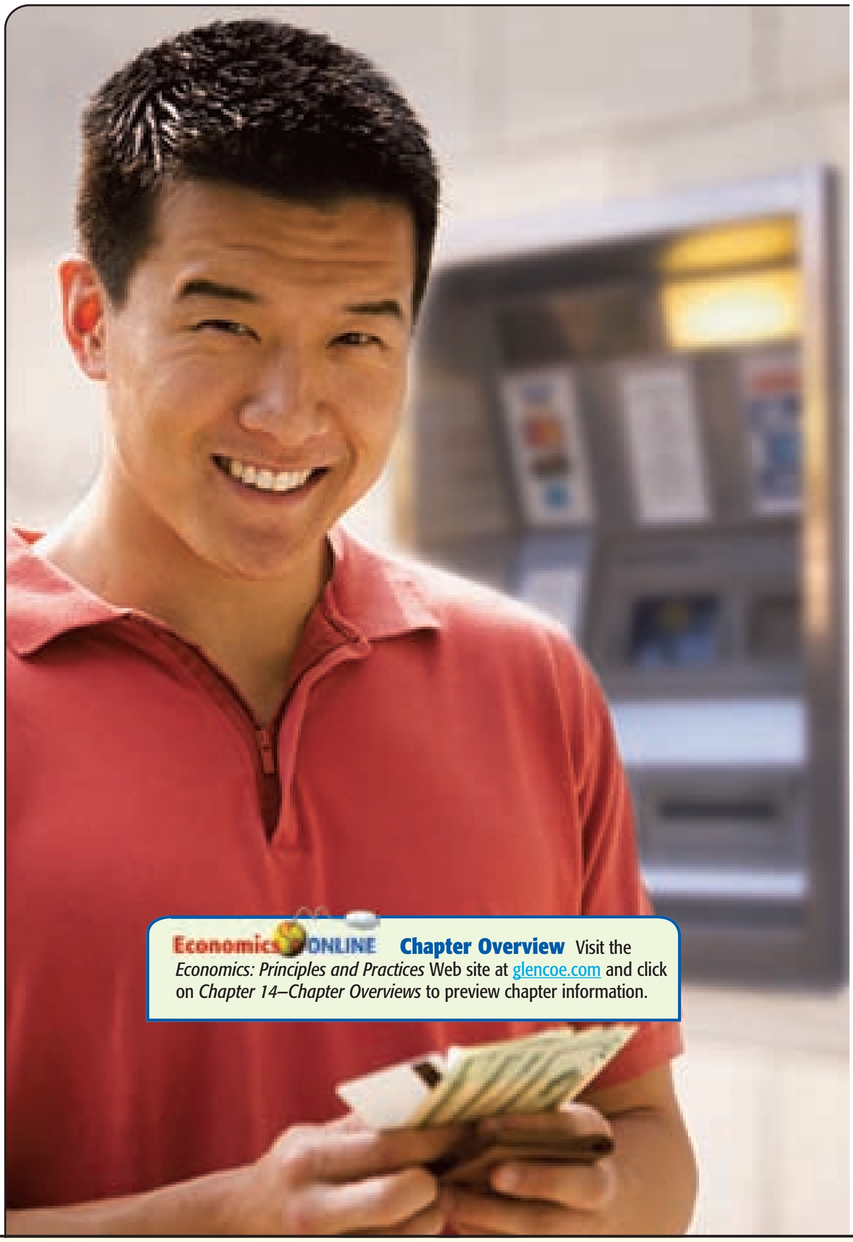
Money, Banking, and the Fed

Why It Matters

Congratulations, you have just been hired by the federal government to completely redesign our money. Before getting started on your design, think about how we use money. Working with a partner, create a design for the new bills and coins. Share your finished product with the class and explain why your money will serve the same purpose(s) as our existing money. Read Chapter 14 to learn more about our monetary system and how the government works to promote economic stability and growth.

The BIG Idea

Governments strive for a balance between the costs and benefits of their economic policies to promote economic stability and growth.



Economics ONLINE **Chapter Overview** Visit the *Economics: Principles and Practices* Web site at glencoe.com and click on *Chapter 14—Chapter Overviews* to preview chapter information.

Our modern banking system allows you to access your money anywhere in the world.

Activity: Launching the Chapter

Speculating Have a volunteer read aloud the Big Idea. **Essential Question: What are some ways that the government can influence economic stability and growth?** *(Possible answers: raising or lowering taxes; buying goods and services; encouraging saving or spending by influencing inflation rates; passing laws to favor certain activities over others)* As they read this chapter, encourage students to look for examples of government intervention in the U.S. economy. **OL**

SECTION 1

The Evolution, Functions, and Characteristics of Money

GUIDE TO READING

Section Preview

In this section, you will learn that money functions as a medium of exchange, a measure of value, and a store of value.

Content Vocabulary

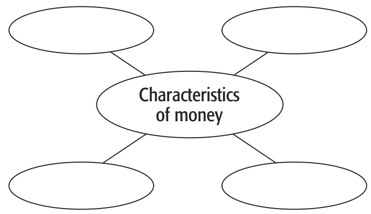
- Federal Reserve System (Fed) *(p. 383)*
- Federal Reserve notes *(p. 383)*
- barter economy *(p. 384)*
- commodity money *(p. 384)*
- fiat money *(p. 384)*
- specie *(p. 385)*
- monetary unit *(p. 386)*
- medium of exchange *(p. 387)*
- measure of value *(p. 387)*
- store of value *(p. 387)*
- demand deposit accounts (DDAs) *(p. 388)*
- M1 *(p. 388)*
- M2 *(p. 388)*

Academic Vocabulary

- revolution *(p. 385)*
- converted *(p. 387)*

Reading Strategy

Describing As you read the section, complete a graphic organizer similar to the one below that describes the characteristics of money.



PRODUCTS IN THE NEWS

—www.ptma.org

Early Money

Before there was money as we know it, there was barter. People in early societies developed forms of proto-money—the use of commodities that everyone agreed to accept in trade. Aztecs used cacao beans. Norwegians once used butter. The early U.S. colonists used tobacco leaves and animal hides (settlers traded deer hides—the origin of our modern word for money: "bucks").

Some items, such as arrowheads, salt, and animal hides, were useful in and of themselves. Gradually, however, people began exchanging items that had no intrinsic value, but which had only agreed-upon or symbolic value. An example is the cowrie shell. Cowrie shells are found on an island off the coast of India. They have been widely used as currency in China, India, Thailand, and in West Africa. ■

It may seem odd that people once used tobacco or shells as a form of money. Frequently, people used things that were easily available and valued by others as a form of money. As a result money came in a variety of forms, shapes, and sizes.

The use of money developed because it makes life easier for people and serves everyone's best interests. In fact, over time money has become a social convention, much like the general acceptance of laws and government.

Today most of our money is issued by the **Federal Reserve System (Fed),** the privately owned, publicly controlled central bank of the United States. It issues paper currency known as **Federal Reserve notes,** a key part of our money supply.

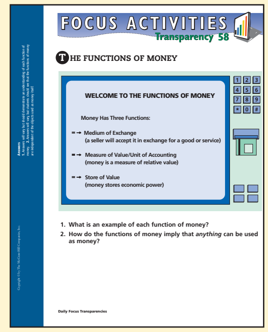
Federal Reserve System (Fed) privately owned, publicly controlled central bank of the United States

Federal Reserve note paper currency issued by the Fed in use today

Focus

Bellringer

Daily Focus Transparency 58



GUIDE TO READING

Answers to Graphic: portable; durable; divisible; limited supply

Resource Manager

R Reading Strategies	C Critical Thinking	D Differentiated Instruction	W Writing Support	S Skill Practice
Teacher Edition • Identifying, p. 385 • Questioning, p. 386 • Making Connections, p. 389 **Additional Resources** • Guid. Read. Act., p. 40 • Read. Ess. & Note-Taking Guide, p. 118	**Teacher Edition** • Evaluating, p. 384 • Det. Cause/Effect, p. 385 • Contrasting, p. 389 **Additional Resources** • Econ. Concepts Trans., Strat. & Act., p. 11 • Econ. Forms and Fin. Pages Trans., Strat. and Act., pp. 5, 24	**Teacher Edition** • Special Ed., p. 384 • ELL, p. 386 • Interpersonal, p. 387 **Additional Resources** • Daily Focus Trans. 58, 60, 61 • Reteach. Act., p. 14 • Personal Finance Act., p. 1	**Teacher Edition** • Expository Writing, p. 388 **Additional Resources** • High School Reading in the Content Area Strat. and Act. • Crit. Think. Act., p. 16	**Teacher Edition** • Analyzing Graphs, p. 387 **Additional Resources** • Graph. Org. Trans., p. 11 • Reading and Study Skills Fold., p. 58 • Math Prac. for Econ., p. 9

Teach

D Differentiated Instruction

Special Education Show students with learning disorders the importance of headings and subheadings for understanding the framework of each section. Illustrate the method by asking students what they would do if they wanted to discover what Section 1 was about. Read aloud the section's headings and subheadings. Ask students to rephrase each one into a complete sentence. **BL**

C Critical Thinking

Evaluating Ask: **How effective would a bartering system be in today's economy? Explain.** *(Answers will vary, but students should point out that it would likely be ineffective. Bartering typically works only in small societies with fairly simple economic systems.)*

Caption Answer: It is exchanged for goods and services provided.

barter economy moneyless economy that relies on trade or barter

commodity money money that has an alternative use as an economic good

fiat money money by government decree

D The Evolution of Money

MAIN Idea People invented money to make life easier.

Economics and You Have you ever tried to trade for something with your friends? Read on to learn how societies began using money to make exchange easier.

C Take a moment to think what life would be like in a **barter economy**, a moneyless economy that relies on trade. Without money, the exchange of goods and services would be more difficult because the products some people have to offer are not always acceptable or easy to divide for payment. For example, how could a farmer with a pail of milk obtain a pair of shoes if the cobbler wanted a basket of fish? Unless there is a "mutual coincidence of wants"—where two people want exactly what the other has and are willing to trade what they have for it—it is difficult for trade to take place.

Life is simpler in an economy with money. The farmer sells the milk for cash and then exchanges the cash for shoes. The cobbler takes the cash and looks for someone selling fish. Money, as it turns out, makes life easier for everybody in ways we may have never considered.

Money in Primitive Societies

Tea leaves compressed into "bricks" comprised money in ancient China, and compressed cheese was used in early Russian trade. In early colonial America, corn and even animal pelts were used as a form of money.

Today, this money would be classified as **commodity money**—money that has an alternative use as an economic good, or commodity. For example, the compressed tea leaves could be used to make tea when not needed for trade. Other items became **fiat money**—money by government decree—such as tiny metallic coins used in Asia Minor in the seventh century B.C. These coins served as money because the government said they were money.

Money in Colonial America

The money used by early settlers in the American colonies was similar to that found in early societies. Some of it consisted of commodity money, and some was fiat money.

Many products—including corn, hemp, gunpowder, and musket balls—served as commodity money. They could be used to settle debts and make purchases. At the same time, colonists could consume these products if necessary.

A commonly accepted commodity money was tobacco, for which the governor of colonial Virginia set a value of three English shillings per pound in 1618. Two years later, colonists used some of this money to bring wives to the colonies.

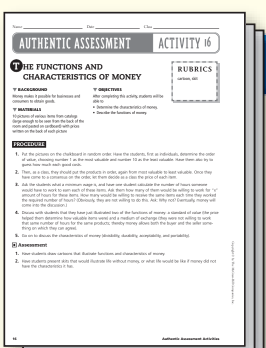
Other colonies established fiat monies. For example, in

Barter Economy As the cartoon shows, trading in a barter economy can be difficult for those wanting to exchange goods for products they may use. ***How does money function as a medium of exchange?***

www.CartoonStock.com

All fixed Ma'am: You owe me two hay-bales, four sugar cubes and three apples...

Differentiated Instruction


AUTHENTIC ASSESSMENT ACTIVITY 16
THE FUNCTIONS AND CHARACTERISTICS OF MONEY

Authentic Assessment Strategies and Activities, p. 16

The Functions and Characteristics of Money

Objective: Determine the functions and characteristics of money.

Focus: Have students discuss bartering, including its limitations as a medium of exchange.

Teach: Guide students through the steps of the activity, and have them complete the assessment items.

Assess: Lead students in a discussion of their responses.

Close: Ask students how they have personally witnessed the functions and characteristics of money.

Differentiated Instruction Strategies

BL Ask students to explain why businesses cannot pay employees with goods such as those shown in the activity.

AL Have students write a short story about life without money.

ELL Have students create an illustration for each of the four characteristics.

Specie Immigrants brought coins made of gold and silver, such as the Austrian taler on the left and the Spanish peso on the right. These coins were used throughout the colonies. ***Why were such coins desirable?***

1637 Massachusetts established a monetary value for wampum—a form of currency the Wampanoag Native Americans made out of white and purple mussel shells. The Wampanoag and the settlers used these shells in trade. White shells were more plentiful than purple ones, so one English penny was made equal to six white or three purple shells.

Early Paper Currency

As time passed, Americans used other forms of money. In some cases, state laws allowed individuals to print their own paper currency. Usually backed by gold and silver deposits in banks, it served as currency for the immediate area. States even printed money in the form of tax-anticipation notes and used them to pay salaries, buy supplies, and meet other expenditures until they received taxes and redeemed the notes.

The Continental Congress issued paper money to finance the Revolutionary War. In 1775 it printed Continental dollars, a form of fiat paper currency with no gold or silver backing. By the end of the war, **C** nearly one-quarter billion Continental dollars had been printed—a volume so large that it was virtually worthless by the end of the **revolution.**

Specie in the Colonies

Colonists also used modest amounts of **specie**—or money in the form of silver or gold coins. These included English shillings, Austrian talers, and various European coins that immigrants had brought to the colonies. Coins were the most desirable form of money, not only because of their mineral content, but because they were in **R** limited supply. By 1776 only $12 million in specie circulated in the colonies, compared to nearly $500 million in paper currency.

The most popular coin in the colonies was the Spanish peso that came to America through trade and piracy. Long before the American Revolution had begun, the Spanish were mining silver in Mexico. They melted the silver into bullion—ingots or bars of precious metals—or minted it into coins for shipment to Spain. When the Spanish treasure ships stopped in the West Indies to buy fresh provisions, however, they often became victims of Caribbean pirates who spent their stolen treasure in America's southern colonies.

The "triangular trade" between the colonies, Africa, and the Caribbean brought more pesos to America. Traders took molasses and pesos from the Caribbean to the colonies. There they sold the molasses to be made into rum and spent their pesos on other goods. The rum was shipped to

specie money in the form of gold or silver coins

C Critical Thinking

Determining Cause and Effect Ask: Why were the Continental dollars virtually worthless at the end of the Revolutionary War? *(They were not backed by gold or silver, and there were too many in circulation.)* **OL**

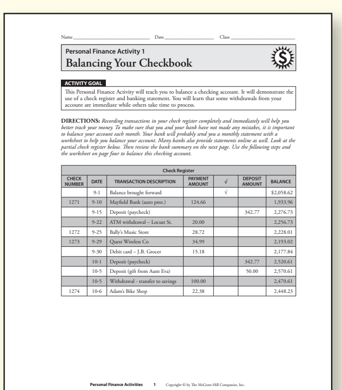
R Reading Strategy

Identifying Have students create a two-column chart with the headings "Name of Coin" and "Country of Origin." Students should complete their charts by identifying coins that the colonists used and the countries those coins represented. *(shillings from England, talers from Australia, pesos from Spain)* **Then ask:** Why were so many foreign coins in circulation in the colonies? *(Answers may vary but should include the concept that the colonies were populated with people from various countries.)* **BL**

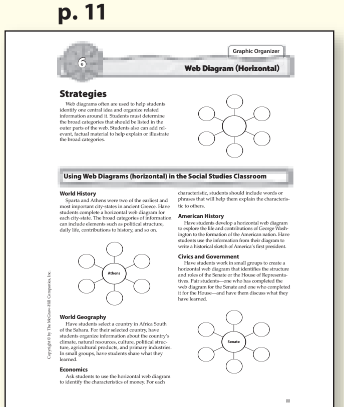
Caption Answer: They were made of gold or silver and were in limited supply.

Leveled Activities

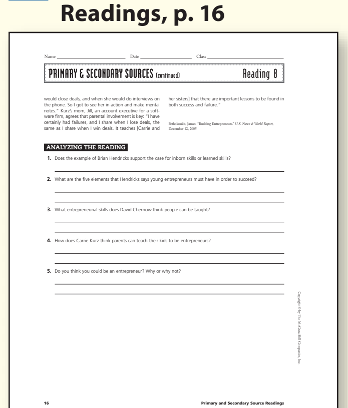
BL Personal Finance Activities, p. 1



OL Graphic Organizer Transparencies, p. 11



AL Primary and Secondary Source Readings, p. 16



R Reading Strategy

Questioning Have student pairs read the subsection and then write three questions that can be answered by the text. Ask pairs to exchange work with partners and answer each other's questions. **BL**

D Differentiated Instruction

English Language Learners
Call on students to name objects that might be used as money today if there were no dollar bills or coins. List at least 10 responses on the board. Then organize students into small groups and direct each group to apply the characteristics of money to the listed objects. Have groups select the object that would best serve as money based on their analysis. **ELL**

Caption Answer: to make it easier to understand

✓Reading Check Answer: commodity money, fiat money, paper currency, and specie or coins

monetary unit standard unit of currency in a country's money supply

Africa, where it was traded for enslaved Africans. The enslaved Africans were taken to the Caribbean to be sold for pesos and more molasses. The trade cycle started anew when molasses and pesos were taken to the colonies.

From "Talers" to "Dollars"

Pesos were known as "pieces of eight," because they were divided into eight subparts known as "bits." Because the pesos resembled the Austrian talers, they were nicknamed "talers," which sounds similar to the word *dollars*. This term became so popular that the dollar became the basic **monetary unit**, or standard unit of currency, in the U.S. money system.

Rather than divide the dollar into eighths as the Spanish had done with the peso, it was decided to divide it into tenths, which was easier to understand. Still, some of the terminology associated with the Spanish peso remains, as when people sometimes call a 25-cent coin—one quarter of a dollar—"two bits."

✓Reading Check **Describing** What kind of money was used in colonial America?

Dollars Today's money is available in both bills and coins. ***Why was the dollar divided into tenths?***

Characteristics and Functions of Money

MAIN Idea Anything can be used as money as long as it is portable, durable, divisible, and limited in supply.

Economics and You When you go shopping, you carry your money with you. Read on to learn how this feature of money is helpful to us.

The study of early money is useful because it helps us understand the characteristics that give money its value. In fact, any substance can serve as money if it possesses four main characteristics.

Characteristics of Money

First, money must be *portable*, or easily transferred from one person to another, to make the exchange of money for products easier. Most money in early societies was very portable—including shells, wampum, tobacco, and compressed blocks of tea.

Second, money must also be reasonably *durable* so it does not deteriorate when it is handled. Most colonial money was quite durable, especially monies like musket balls and wampum. Even the fiat paper money of the colonial period was durable in the sense that it could be easily replaced by new bills when old ones became worn.

Third, money should be easily *divisible* into smaller units so that people can use only as much as they need for a transaction. Most early money was highly divisible. The blocks of tea or cheese were cut with a knife. Bundles of tobacco leaves could easily be broken apart. Even Spanish pesos were cut with a knife into eights to make "bits" for payment.

Finally, if something is to serve as money, it must be available, but only in *limited supply*. Stones used as money on the Yap Islands, for example, were carried in open canoes from other islands 400 miles away. Because navigation was uncertain and the weather was unpredictable, only one canoe in 20 completed the round-trip, resulting in a limited supply of stone money.

Hands-On Chapter Project
Step 1

Creating a U.S. Currency Time Line

In this project, students will research and evaluate the types of currency used throughout U.S. history.

Step 1: Researching Forms of Money. Students will break into small groups to research the types of currency used throughout U.S. history.

Directions: Organize the class into small groups. Explain to students that they will be learning about the history of currency in the United States and evaluating the changes to it over time. Assign each group a particular time period in U.S. history. Instruct each group to use library resources and the Internet to research the various types of currency found in the United States during their assigned period. Encourage students to use simple outlines or graphic organizers to record their findings.

Organizing When students have completed their research, ask them to review their findings and determine what information they would choose to include on a class time line depicting the history of currency in the United States. Direct them to prepare a list of the types of currency they researched and the dates each type was used. **OL**

(Chapter Project continued in Section 2.)

The Global Economy & YOU

The Euro

Go to any U.S. coin shop, and you can buy German marks, French francs, Italian lira, and Greek drachmas–often a whole bag of coins–for just a few bucks. Why so cheap? Because those coins have been replaced by the euro, they are now virtually worthless.

In January 2002, most European Union (EU) nations replaced their own money with the euro. A historic milestone in the process of European integration, the euro has created a new monetary reality for 300 million Europeans. A generation ago, few would have believed this possible. People take their money personally. It usually includes national symbols, heroic figures, or government leaders. So how did the EU countries agree on a single type of currency? The fact is, they didn't.

The euro bills depict stylized buildings from different architectural periods. The coins, however, are unique for each country. While one side of the coins is the same, the other side reflects the country from which it originated.

Money, like almost everything else, loses its value whenever there is too much of it. **S** This was a major problem for most types of commodity money. In Virginia, the price of tobacco went from 36 pennies a pound to 1 penny a pound after every-one started growing their own money. Wampum even lost its value when settlers used industrial dyes to turn white shells into purple—thereby doubling their value.

Functions of Money

Any substance that is portable, durable, divisible, and limited in supply can serve **D** as money. If it does, it will serve three roles in the economy.

Money is a **medium of exchange**—something accepted by all parties as payment for goods and services. Throughout history, societies have used many materials as a medium of exchange, including gold, silver, and even salt. In ancient Rome, salt was so valuable that each soldier received an annual salt payment called a "salarium." The modern term for an annual income—*salary*—is based on this Latin term.

The second function of money is to serve as a **measure of value**—a common measuring stick that can be used to express worth in terms that most individuals understand. This is what we observe whenever we see a price tag on something—a value that we can use to make comparisons with other products. In the United States, our measure of value is expressed in dollars and cents.

Third, money serves as a **store of value**—the quality that allows purchasing power to be saved until needed. For example, goods or services can be **converted** into money, which is easily stored until needed. This feature of money allows a period of time to pass between earning and spending an income.

Modern Money

Today we have several different types of money. Some of it is in the form of Federal Reserve notes and some in the form of

medium of exchange money or other substance generally accepted as payment for goods and services

measure of value a function of money that allows it to serve as a common way to express value

store of value a function of money that allows people to preserve value for future use

S Skill Practice

Analyzing Graphs Have students create a graph to illustrate the following sentence from the text: "Money, like almost everything else, loses its value whenever there is too much of it." *(Students should demonstrate understanding of supply and demand graphs.)* **OL**

D Differentiated Instruction

Interpersonal Have students work in small groups to prepare research reports on the money of a selected country. Have groups focus on: (1) how the historical development of money, and the money the country uses today, reflects the country's culture; (2) how successfully the country's money performs the three functions of money; (3) how the country's money measures up to the four characteristics of money. Have groups illustrate their reports with examples of the country's present coin and paper money. Invite volunteers to share their reports with the class. **AL**

Additional Support

Extending the Content

The First Central Bank The Bank of Amsterdam was established in Holland in 1609. At that time, Amsterdam was a center of world trade. More than 340 kinds of silver coins and about 500 types of gold coins circulated throughout the city. Dutch merchants had little idea how much these coins were worth, so the Bank of Amsterdam was set up under a charter from the city to standardize the currency. The Bank of Amsterdam operated as Holland's central bank for more than 200 years. After making a series of bad loans, however, it failed and went out of business in 1819—almost 100 years before America's central bank was founded.

W Writing Support

Expository Writing Have each student write a paragraph explaining the different types of money and the definitions the federal government uses for the money supply. **OL**

✓Reading Check **Answer:** It is lightweight and convenient, and it can be easily transferred from one person to another. It is reasonably durable, is divisible, and has limited availability.

Assess

Use the Interactive Tutor Self-Assessment CD-ROM to review Section 1, and then assign the Section 1 Review as homework or as an in-class activity.

Close

Inferring **Ask:** What changes can be made to money that do not affect its functions and characteristics? *(Possible answer: Different illustrations or designs can be used.)* **OL**

demand deposit account (DDA) account from which funds can be removed by writing a check and without having to gain prior approval from the depository institution

M1 component of the money supply relating to money's role as a medium of exchange

M2 component of the money supply relating to money's role as a store of value

metallic coins issued by the U.S. Bureau of the Mint. Other forms of money include **demand deposit accounts (DDAs)**, or funds deposited in a bank that can be accessed by writing a check and without having to secure prior approval of the institution.

Because of this, the Fed uses different definitions for the money supply. The first **W** is **M1**, which includes coins and currency, traveler's checks, DDAs, and checking accounts held at other depository institutions. This definition of the money supply relates to money's function as a medium of exchange. A broader definition is **M2**, which includes M1 along with savings deposits, time deposits, and money market funds—all of which relate to money's function as a store of value.

While our modern money may seem to be quite different from earlier forms of money, it shares the fundamental characteristics and functions of money. Modern money is *portable*. Our currency is lightweight, convenient, and can be easily transferred from one person to another. The same applies to the use of checks.

Skills Handbook
*See page **R46** to learn about **Drawing Conclusions**.*

Modern money is reasonably *durable*. Metallic coins last about 20 years under normal use. Paper currency is also reasonably durable, with a $1 bill lasting about 18 months in circulation. The introduction of the Sacagawea dollar coin was part of an attempt to make the money supply even more durable by replacing the $1 bill, a low-denomination currency, with longer-lasting coins.

Modern money is *divisible*. The penny, which is the smallest denomination of coin, is small enough for almost any purchase. In addition, people can write checks for the exact amount of a purchase.

If anything, modern money has an uneven track record when it comes to *limited availability* and stability in value. The money supply often grew at a rate of 10 to 12 percent a year in the 1970s, which contributed greatly to the inflation of the early 1980s. It has slowed considerably since then, which has led to a period of price stability.

✓Reading Check **Explaining** How does modern money reflect the functions and characteristics of money?

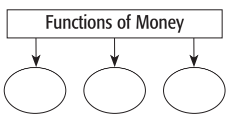
SECTION 1 Review

Vocabulary

1. **Explain** the significance of Federal Reserve System (Fed), Federal Reserve note, barter economy, commodity money, fiat money, specie, monetary unit, medium of exchange, measure of value, store of value, demand deposit account (DDA), M1, and M2.

Main Ideas

2. **Explaining** Why was the "dollar" adopted as the basic monetary unit of the United States?
3. **Identifying** Use a graphic organizer like the one below to identify the functions of money.



Critical Thinking

4. **The BIG Idea** How does money advance the exchange of goods and services?
5. **Inferring** Why would some people be more willing to accept commodity money rather than fiat money?
6. **Drawing Conclusions** Why did the use of money replace the barter system?
7. **Analyzing Visuals** Study the cartoon on page 384. How does this cartoon spotlight the basic problem of a barter economy?

Applying Economics

8. **Functions of Money** Create a list of the ways you have used money during the last week. Write the actions on a piece of paper. Next to each, identify which of the functions of money your actions illustrated.

SECTION 1 Review

Answers

1. All definitions can be found in the section and the Glossary.
2. Spanish pesos, the most popular coin in the colonies, were nicknamed talers, which sounds like "dollars." This term became so popular that it was made the basic monetary unit in the U.S. money system.
3. medium of exchange; measure of value; store of value
4. The use of money advances the exchange of goods and services because it helps buyers and sellers complete a trade. Without money, buyers would have to want exactly what the sellers have and the sellers would have to be willing to accept exactly what the buyers have to trade.
5. If individuals have no faith in the government that issues the fiat money, they might prefer commodity money. Commodity money has an alternate economic use and consequently has value even when not used as money.
6. Money replaced the barter system because people found it difficult to trade what they had for what they wanted. Unless there is a "mutual coincidence of wants," it is difficult for trade to take place.
7. The problem with a barter economy is finding someone who will exchange what they have for what you have.
8. Answers will vary but should demonstrate a clear understanding of the functions of money.

CASE STUDY

Keep the Change

R

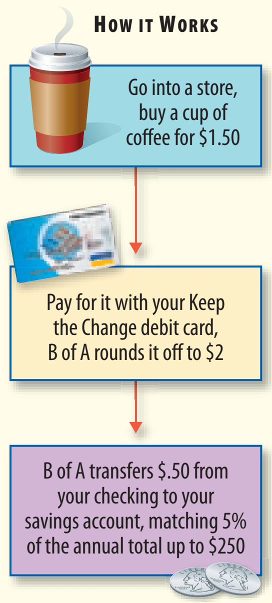
Thinking Outside the Bank

When you think of banks, you probably see an unimaginative, conservative industry. Most banks offer very similar services and interest rates on loans, savings accounts, and certificates of deposit. So how can a bank differentiate itself to attract new customers?

"Keep the Change"

Bank of America came up with a plan and in 2005 launched a new program called "Keep the Change." The bank tallies each purchase its customers make with their debit cards and rounds it up to the next higher dollar. The bank then transfers the difference, or "change," into the Bank of America savings accounts of customers. To sweeten the pot, the bank matches the first three months of savings at 100 percent and each month thereafter at 5 percent, up to a yearly total of $250. The bank's contributions are made annually, but customers can still watch their money grow with interest on a daily basis.

How it Works



It Adds Up!

Daily Purchases	Purchase Price	Amount Transferred to Savings
CD:	$9.63	$.37
Latte:	$3.80	$.20
Burger:	$2.29	$.71
Total:	$15.72	$1.28

Don't Even *Think* About Saving

How did Bank of America come up with such a new idea in an industry not known for innovation? In early 2004, the bank hired researchers to study people's banking and spending habits. They found that some people rounded up their payments to make balancing their checkbooks easier and quicker. They also saw purchasing behaviors that reinforced the stereotype that Americans are big spenders but not big savers.

The "Keep the Change" program takes the responsibility for saving out of customers' hands while it rewards spending. Even so, it's still money in the bank. Instead of tossing change into a jar each C night, 2.5 million new Bank of America customers allow the bank to slip their change into an interest-bearing savings account.

Analyzing the Impact

1. **Summarizing** Why did Bank of America introduce its "Keep the Change" program?
2. **Drawing Conclusions** How much money would a person save per month and per year if making a weekly purchase of the items in the table?

CASE STUDY

Focus

R Reading Strategy

Making Connections Lead a discussion about saving money. Ask students why people might find it difficult to save money. *(Possible answer: It takes time, planning, and organization.)* OL

Teach

C Critical Thinking

Contrasting Ask: What is the difference between saving by putting change into a jar each night and saving by putting change into an interest-bearing savings account? *(Putting change into a jar does not earn interest as it would if you put it into an interest-bearing savings account.)* OL

Analyzing the Impact

Answers:

1. to reward customers for using debit cards and encourage savings contributions
2. per month: $35.84; per year: $553.73

Activity: Technology Connection

Comparing and Contrasting Organize students into groups of three, and have groups use Internet resources to investigate the services of different banks located in your area. Have groups compare and contrast services offered on checking and savings accounts, online banking, and other incentives offered by the banks to attract future customers. Ask each group to present their findings to the class in a multimedia presentation. After all groups have presented, have the class discuss which bank they think offers the most lucrative services, which services they feel are most important, and what incentives banks could use to secure students' business. Take a class poll to determine students' preferences. OL

Additional Support

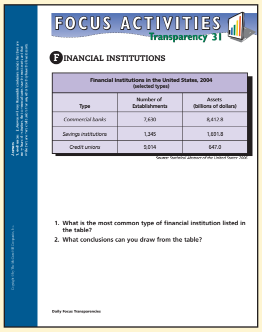
Teacher Tip

Ensuring Variety Make sure that each group is researching different banks so that students' presentations cover a wide range of banks in your area. You might also suggest that at least one group research an online bank.

Focus

Bellringer

Daily Focus Transparency 31


FOCUS ACTIVITIES Transparency 31

FINANCIAL INSTITUTIONS

Financial Institutions in the United States, 2004 (selected types)		
Type	Number of Establishments	Assets (billions of dollars)
Commercial banks	7,630	8,412.8
Savings institutions	1,345	1,691.8
Credit unions	9,014	647.0

Source: *Statistical Abstract of the United States: 2006*

1. What is the most common type of financial institution listed in the table?
2. What conclusions can you draw from the table?

Daily Focus Transparencies

GUIDE TO READING

Answers to Graphic:

1861: Congress authorizes legal tender

1863: Congress creates a national banking system

1878: U.S. government introduces silver certificates

1913: Congress creates the Federal Reserve

1934: 10,000 banks close or merge

SECTION 2

The Development of Modern Banking

GUIDE TO READING

Section Preview

In this section, you will learn that many different types of money have been used throughout American history, and that fiat money is used today.

Content Vocabulary

- state bank *(p. 391)*
- legal tender *(p. 392)*
- national bank *(p. 392)*
- national currency *(p. 392)*
- gold certificate *(p. 393)*
- silver certificate *(p. 393)*
- central bank *(p. 394)*
- bank run *(p. 395)*
- bank holiday *(p. 395)*
- fractional reserve system *(p. 396)*
- legal reserves *(p. 396)*
- reserve requirement *(p. 396)*
- member bank reserve (MBR) *(p. 396)*
- excess reserves *(p. 396)*

Academic Vocabulary

- clauses *(p. 391)*
- initially *(p. 395)*

Reading Strategy

Listing As you read the section, complete a time line similar to the one below by listing major events in U.S. monetary history in the appropriate spaces.

1860 1880 1900 1920 1940

1862

1886

1900

1861 Gold certificates issues

1934

PRODUCTS IN THE NEWS

—Bureau of Engraving and Printing

New $10 Bills

On March 2, 2006, the Federal Reserve banks issued a redesigned Series 2004 $10 note to the public through commercial banks. The notes will begin circulating immediately in the United States, and will then be introduced in other countries. . . .

New money designs are being issued as part of an ongoing effort to stay ahead of counterfeiting, and to protect the economy and the hard-earned money of U.S. currency users. The new series began with the introduction of the $20 note on October 9, 2003, and continued with the $50 note issued on September 28, 2004. ■

Creating and maintaining a dependable money supply is more difficult than most people think. Over the years, the United States has experimented with different kinds of money with varying success.

Early attempts included coins made of gold and silver, as well as paper currency backed by gold and silver. Today some of our money circulates as paper currency, but most of it exists in the form of electronic bookkeeping entries. Neither is backed by gold or silver. Instead, we have a managed money supply that is accepted by everyone simply because people have faith in it.

Managing this money supply takes an enormous amount of work. As you read in the news story, we even have to make it difficult for others to copy money so that it stays in limited supply—lest it go the way of the Continental dollar.

Resource Manager

R Reading Strategies	C Critical Thinking	D Differentiated Instruction	W Writing Support	S Skill Practice
Teacher Edition • Skimming, p. 391 • Identifying, p. 392 • Sequencing, p. 393 **Additional Resources** • Guid. Read. Act., p. 41 • Read. Ess. & Note-Taking Guide, p. 121 • Econ. Cont. Vocab. Act., p. 14	**Teacher Edition** • Contrasting, p. 393 • Evaluating, p. 397 **Additional Resources** • Econ. Concepts Trans., Strat. & Act., p. 9 • Quizzes and Tests, p. 174 • Enrichment Act., p. 14	**Teacher Edition** • Adv. Learners, p. 391 • ELL, p. 392 • Special Ed., p. 394 • Auditory/Musical, p. 395 **Additional Resources** • Daily Focus Trans. 59, 31 • Math Prac. for Econ., p. 9	**Teacher Edition** • Persuasive Writing, p. 396 • Expository Writing, p. 398 **Additional Resources** • High School Writing Process Trans. • Pri./Sec. Source Read., p. 31	**Teacher Edition** • Making Predictions, p. 394 • Visual Literacy, p. 395 • Using Tables and Charts, p. 396 **Additional Resources** • Reading and Study Skills Fold., p. 58 • Reinforcing Econ. Skills, p. 3

The Development of Banking in America

MAIN Idea The United States experimented with many different kinds of money before it created the Federal Reserve System.

Economics and You Have you ever wondered why the dollar bill is green? Read on to learn why the government decided to print our money this way.

Banking in the United States has gone through many changes. At one time, banking was virtually unregulated. This led to abuses, and problems with the money supply eventually required the intervention of government.

Privately Issued Bank Notes

During the Revolutionary War, nearly 250 million Continental dollars were printed. By the end of the Revolution, Continental currency had become worthless, and people did not trust the government to issue anything except coins. Accordingly, Article 1, Section 8, of the United States Constitution states:

> *The Congress shall have the power*
> *To coin money, regulate the value thereof, and of foreign coin, and fix the standard of weights and measures;*
> *To provide for the punishment of counterfeiting the securities and current coin of the United States; . . .*
> *To make all laws which shall be necessary and proper for carrying into execution the foregoing powers, and all other powers vested by this Constitution in the government of the United States, or in any department or officer thereof.*

Article 1, Section 10, further states:

> *No State shall . . . coin money; emit bills of credit; make anything but gold and silver coin a tender in payment of debts. . . .*

Because of these **clauses,** the federal government did not print paper currency until the Civil War. Instead, the printing, distribution, and regulation of the paper money supply were left to the discretion of privately owned banks.

state bank bank that receives its charter from the state in which it operates

Growth of State Banking

Banking became popular after the Revolution because the new Constitution allowed private banks to issue paper currency. By 1811 the country had about 100 state banks. A **state bank** is a bank that receives its operating charter from a state government.

Banks issued their own currency by printing their notes at local printing shops. The banks then put these notes in circulation with the assurance that people could exchange them for gold or silver if they ever lost faith in the bank or its currency.

At first, most banks printed only the amount of currency they could reasonably back with their gold and silver reserves. Others, however, were not as honest and printed large amounts of currency in remote areas to make it difficult for people to redeem their currency.

Problems With Currency

Even when banks were honest, problems with their currency arose. First, each bank issued its own currency in different sizes,

Money Paper currency such as this Continental dollar helped finance the Revolutionary War. ***Why did the federal government stop printing paper currency?***

CHAPTER 14, SECTION 2

Teach

R Reading Strategy

Skimming Have students skim the page to find the answer to this question: **What happened to currency at the end of the Revolutionary War?** *(It had become worthless.)* BL

D Differentiated Instruction

Advanced Learners Have students redesign forms of U.S. currency. Ask students to brainstorm a list of national leaders, prestigious citizens, or well-known places that they think should be honored on currency. You might suggest that they research foreign currencies for design ideas. Post students' designs in the classroom. AL

Caption Answer: Clauses in the Constitution gave Congress the power to coin money. States and the federal government did not have that power.

Additional Support

Extending the Content

Have You Got a Buck? In the frontier areas during the colonial period, hunters often left their deerskins at trading posts until they could pick them up at a later date. As proof of ownership, the hunters would obtain a receipt, which they could exchange among themselves or use at the trading post for supplies. The receipts, worth about a dollar because of the value of the hides, were called "bucks"—hence, the common name for the dollar.

R Reading Strategy

Identifying **Ask:** What major event in U.S. history changed commercial banking forever? *(the Civil War)* **BL**

D Differentiated Instruction

English Language Learners

To help students understand the term *legal tender*, tell them that there are several different meanings for the word *tender*. In the case of money, it means "the thing offered." Money is the thing offered in payment of a debt, and it must be accepted as payment. Ask students to write a sentence using the term *legal tender*. Then have student pairs check the accuracy of each other's sentences. **ELL**

Caption Answer: There were hundreds of different kinds of notes, too many notes issued, and problems with counterfeiting.

Private Bank Notes After the Revolutionary War, private banks issued their own currencies. ***What were the major problems with such currencies?***

legal tender fiat currency that must be accepted for payment by decree of the government

national bank commercial bank chartered by the National Banking System

national currency currency backed by government bonds and issued by commercial banks in the National Banking System

colors, and denominations. As a result, hundreds of different kinds of notes could be in circulation in any given city.

Second, banks were tempted to issue too many notes because they could print more money whenever they wanted. Third, counterfeiting became a major problem. With so many different types of notes in circulation, many counterfeiters did not even bother to copy other notes. Instead, they just made up new ones.

By the time of the Civil War, more than 1,600 banks were issuing more than 10,000 different kinds of paper currency. Each bank was supposed to have backing for its notes in the form of gold or silver, but this was seldom the case. As a result, when people tried to buy something, merchants would often check their notes against the latest listing of good and bad currencies before deciding which ones they would accept in payment.

R The paper currency component of the nation's money supply was badly in need of an overhaul. Politically powerful local bankers, however, resisted change until an event came along that would change commercial banking in the United States forever—the Civil War.

Greenbacks

When the Civil War erupted, both the Union and the Confederacy needed to raise enormous sums to finance the war. Congress tried to borrow money by selling bonds, but this did not raise as much money as the federal government needed. As a result, Congress decided to print paper currency for the first time since the Constitution was adopted.

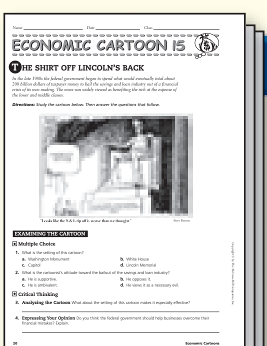
In 1861 Congress authorized the printing of \$60 million in the new currency. D Although this currency had no gold or silver backing, it was declared **legal tender**—fiat currency that must be accepted in payment for debts. These new notes were soon dubbed "greenbacks" because the reverse sides of the notes were printed with green ink. The green backs distinguished the new notes from the state notes already in circulation, because these were usually blank on the back.

The National Banking System

As the war dragged on, people feared that the greenbacks—like the Continental dollars used almost a century earlier to finance the Revolutionary War—might become worthless. When the greenbacks did lose some of their value, people avoided using them, forcing Congress to find another way to pay for the war.

In 1863 Congress enacted the National Currency Act, which created a National Banking System (NBS) made up of national banks. A **national bank** is a privately owned bank that receives its operating charter from the federal government. These banks issued their own notes called **national currency** that were backed with

Differentiated Instruction



Economic Cartoons, p. 20

The Shirt Off Lincoln's Back

Objective: Interpret a cartoon to learn more about the history of banking in the United States.

Focus/Teach: Ask students to describe Abraham Lincoln and the ideals that he represents. Then have students complete the activity.

Assess: Discuss students' interpretations of the cartoon.

Close: Discuss with students how events such as the bailout of the savings and loan industry have affected American banking.

Differentiated Instruction Strategies

BL Ask students to identify clues to the cartoonist's perspective.

AL Have students draw a cartoon about another U.S. banking event.

ELL Have students create a table identifying the bailout's effects on the upper and lower/middle classes.

bonds that the banks bought from the federal government. The government hoped that rigorous bank inspections and other high standards would give people confidence in the new banking system and its currency. The new system also would help the government because banks that joined the NBS would buy the bonds that helped supply the government with funds needed to finance the Civil War.

R

Initially, only a few state-chartered banks joined the system because it was easier for them to print their money at local printers. Finally, in 1865 the federal government forced state banks to become part of the National Banking System by placing a 10 percent tax on all privately issued bank notes. Because state-chartered banks could not afford the tax, they withdrew their notes, leaving only the greenbacks and currency issued by the NBS in circulation.

As a result of the need to finance the Civil War, the makeup of the paper component of the money supply shifted from being entirely privately issued to being entirely publicly issued.

Other Federal Currencies

The 10 percent tax greatly simplified the money supply by causing the removal of more than 10,000 different sizes and denominations of state bank notes. Before long, however, new types of federal currency appeared.

In the same year the NBS was created, the government issued **gold certificates**—paper currency backed by gold placed on deposit with the United States Treasury. At first, these certificates were printed in large denominations for use exclusively by banks, but by 1882 they were also issued in smaller denominations for use by the general public.

In 1878 the government introduced **silver certificates**—paper currency backed by silver dollars and bullion placed on reserve with the Treasury. The government was already minting silver dollar coins, but their bulky size made them inconvenient. When silver dollars were used as backing, the certificates became more popular and increased the demand for silver. This appeased both the silver miners and the public who wanted an alternative to the bulky silver dollars.

✓Reading Check **Explaining** Why did the government issue greenbacks in 1861?

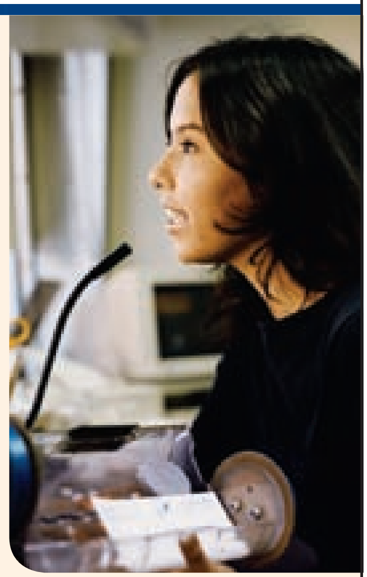
gold certificate paper currency backed by gold and issued between 1863 and 1934

C

silver certificate paper currency backed by, and redeemable for, silver from 1878 to 1968

CAREERS

Bank Teller



The Work

* Handle a wide range of banking transactions, including cashing checks, accepting deposits and loan payments, and processing withdrawals
* Sell savings bonds and traveler's checks, and handle foreign currencies or commercial accounts
* Explain to customers the various types of accounts and financial services the bank offers

Qualifications

* Solid computer, numerical, clerical, and communication skills
* Consistent attention to detail
* Must enjoy public contact, feel comfortable handling large amounts of money, and should be discreet and trustworthy
* High school diploma

Earnings

* Median annual earnings: $21,120

Job Growth Outlook

* Slower than average

Source: *Occupational Outlook Handbook*, 2006–2007 Edition

Teach

R Reading Strategy

Sequencing Ask: What steps did the National Bank take to create a new banking system and establish its currency? *(issued their own notes called national currency; implemented bank inspections; set high standards for the industry; placed a 10 percent tax on privately owned bank notes)* **OL**

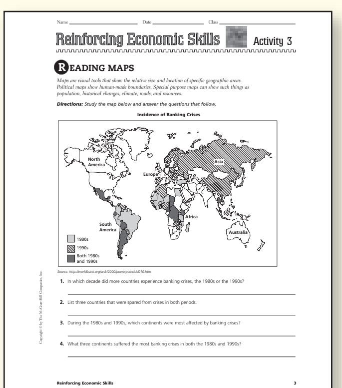
C Critical Thinking

Contrasting Have students use a graphic organizer to list the differences between gold certificates and silver certificates. *(Gold certificates were issued in 1863, backed by gold, placed on deposit with the U.S. Treasury, and printed in large denominations used by banks and small denominations used by the general public. Silver certificates were issued in 1878, backed by silver, placed on reserve with the Treasury, and used by the public.)* **OL**

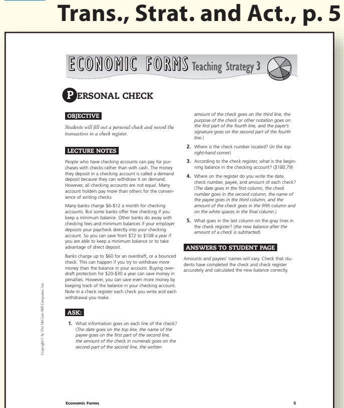
✓Reading Check **Answer:** to finance the Civil War

Leveled Activities

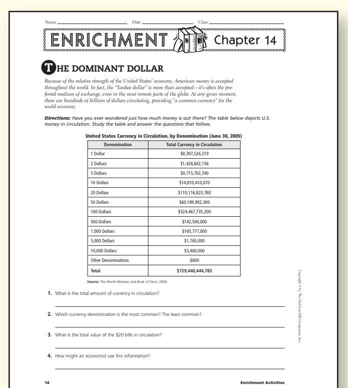
BL Reinforcing Economic Skills, p. 3



OL Economic Forms and Financial Pages Trans., Strat. and Act., p. 5



AL Enrichment Activities, p. 14



Teach

D Differentiated Instruction

Special Education Ask students to read the first sentence of the bracketed paragraph. Then set a purpose for reading the rest of the paragraph by having students look for ways that the banking system was showing signs of strain. *(The National Banking System was having trouble providing enough currency for the growing nation, it was not designed to deal with checking accounts, and minor recessions were causing major problems for banks.)* BL

S Skill Practice

Making Predictions **Ask:** How do you think that the Great Depression impacted banking? *(Students will likely predict that the Depression devastated the banking industry.)* Have students continue reading to check the accuracy of their predictions. OL

Caption Answer: Depositors were concerned about the safety of their money and wanted to withdraw it before the bank failed.

central bank bank that can lend money to other banks in times of need

The Creation of the Fed

MAIN Idea The Federal Reserve System is the nation's central bank.

Economics and You Have you ever wondered where the money you might borrow to buy a car comes from? Read on to learn how banks generate these funds.

By the turn of the twentieth century, the banking system was showing signs of strain. First, the National Banking System, designed primarily to help the federal government finance the Civil War, was having difficulty providing enough currency for **D** the growing nation. Second, checking accounts were becoming more popular, and the banking system was not designed to deal with this new method of payment. Third, even minor recessions were causing major problems for banks and other lending institutions.

The Federal Reserve System

Reform came in 1913 when Congress created the Federal Reserve System, or Fed, as the nation's central bank. A **central bank** is a bank that can lend to other banks in times of need.

To ensure membership in the Fed, all national banks were required, and all state-chartered banks were eligible, to become "members"—or part owners—of the Fed. Because the Fed was organized as a corporation, any bank that joined had to purchase shares of stock in the system, just as a private individual purchases shares in a regular corporation. As a result, privately owned banks, not the government, own the Federal Reserve System.

The Fed issued its own currency, called Federal Reserve notes, which eventually replaced all other types of federal currency. Because the Fed had the resources to lend to other banks during periods of difficulty, the Fed became the nation's first true central bank.

S Banking in the Great Depression

Despite the creation of the Fed, many banks were only marginally sound during the 1920s. Part of the reason was an overexpansion of banking between the Civil War and 1921, when the total number of banks exceeded 31,000. Although some consolidation occurred between 1921 and 1929, the banking industry was overextended when the Great Depression began in 1929.

The Great Depression When depositors became concerned about the safety of their money, they often started bank runs, such as this on on the Federal American Bank. ***Why did bank runs occur?***

Additional Support

Activity: Interdisciplinary Connection

Literature Have students research the Internet or visit the library to find personal memoirs of people who lived through the Great Depression. (One example of such a book is *Hard Times: An Oral History of the Great Depression* by Studs Terkel. Some of the personal histories in the book are about people who lost all their savings during the Depression.) Have students prepare reports on their findings. Then organize students into groups of three or four, and allow time for them to share their reports with the group. Ask groups to identify common characteristics found in the various pieces they read. Then invite groups to compare their results in a class discussion. OL

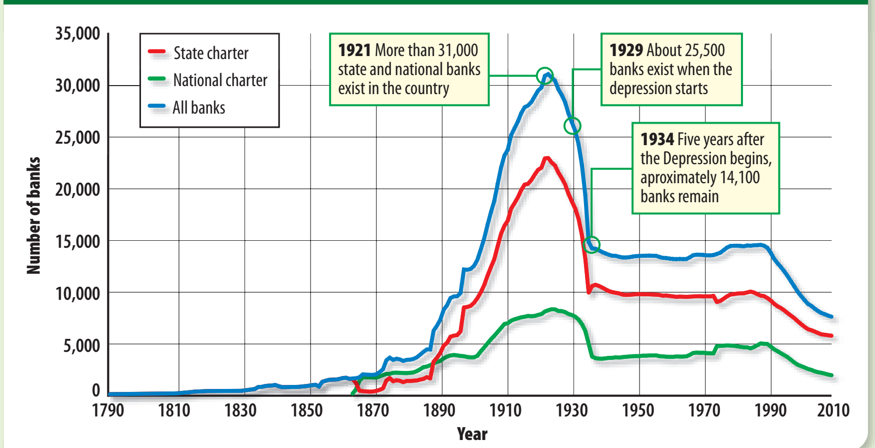
Figure 14.1 ▶ State and National Banks

▶ The number of banks in the United States grew rapidly after 1880 and peaked in 1921. A period of mergers and consolidations took place from 1921 to 1929, after which the Great Depression took its toll. The number of banks remained relatively constant from 1933 to 1985, when another wave of mergers took place.

Economic Analysis ***What can you infer about the ratio of state banks to national banks?***

Graphs In MOtion
See StudentWorks™ Plus or glencoe.com.

Number of State and National Banks



Source: Federal Deposit Insurance Corporation; *Historical Statistics of the United States, Colonial Times to 1970;* Office of the Comptroller of the Currency

As **Figure 14.1** shows, a staggering number of bank failures occurred during the 1930s. At the start of the Depression, about 25,500 banks existed—none of which had deposit insurance for their customers. As a result, concern about the safety of bank deposits often caused a **bank run**—a rush by depositors to withdraw their funds from a bank before it failed. This made the situation worse, causing more banks to fail.

On March 5, 1933, President Roosevelt announced a **bank holiday**—a brief period during which every bank in the country was required to close. Several days later, after Congress passed legislation to strengthen the banking industry, most banks were allowed to reopen. Still, the Great Depression took its toll, and by 1934 more than 10,000 banks had closed or merged with stronger banks.

Federal Deposit Insurance

When banks failed during the Great Depression, depositors lost all their savings. The Banking Act of 1933, also known as the Glass-Steagall Act, was passed to strengthen the banking industry. The act also created the Federal Deposit Insurance Corporation (FDIC), which **initially** insured customer deposits to a maximum of $2,500 in the event of a bank failure.

The insurance did little for those who lost their savings before 1934, but it has provided a sense of security in banking

bank run sudden rush by depositors to withdraw all deposited funds, generally in anticipation of bank failure or closure

bank holiday brief period during which all banks or depository institutions are closed to prevent bank runs

Teach

S Skill Practice

Visual Literacy **Ask:** What statement would summarize the graph content? *(Possible answer: The number of state and national banks has decreased since 1921.)* OL

D Differentiated Instruction

Auditory/Musical Have students listen to songs from the Great Depression that touch upon the poverty and misery of the era. Examples include "Brother, Can You Spare a Dime?" (performed by Bing Crosby), "I Ain't Got No Home" (by Woody Guthrie), and "Eleven Cent Cotton, Forty Cent Meat" (by Bob Miller). Discuss the subject matter in the songs, especially whom the singers seem to blame for their poor conditions. Have each student write a paragraph responding to the songs. OL

Economic Analysis
Answer: From 1890 until the present, state banks have outnumbered national banks.

Additional Support

Extending the Content

Confidence in Banks Returns The importance of people's confidence in banks became apparent on March 1, 1933. Six states declared a "bank holiday" to prevent depositors from making a run on the banks to withdraw their money. Widespread panic peaked a few days later. By March 13, banks around the country began to reopen, and by the end of March, three-fourths of the nation's banks were operating. In June, Congress passed the Banking Act of 1933, which established the Federal Deposit Insurance Corporation (FDIC). The U.S. Treasury and the twelve Federal Reserve Banks provided the capital necessary to establish the FDIC, and steps were taken to form the organization. With the success of deposit insurance in 1934, public sentiment toward the banking industry began to change and the public's confidence in banks returned.

Teach

S Skill Practice

Using Tables and Charts

Ask: What conclusion can you draw from the information in the graph? *(Possible answer: Banks gain a large amount of money with the 20 percent reserve requirement.)* What would be the eventual size of the money supply if there was a 25 percent reserve requirement? *($4,000)* A 15 percent reserve requirement? *($6,666.67)* **OL**

W Writing Support

Persuasive Writing Have students write a paragraph stating their opinion of the fractional reserve system. Is it a fair or an unfair practice from the point of view of depositors? Invite volunteers to share their opinions in a class discussion. **OL**

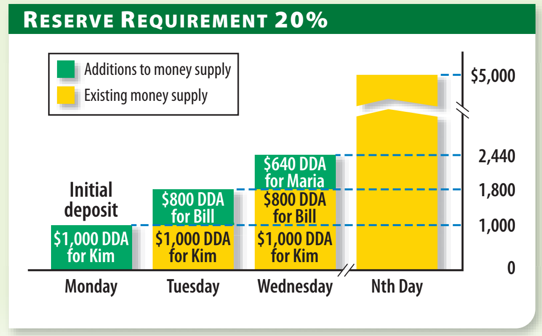
Economic Analysis

Answer: $10,000

Figure 14.2 ▶ **Fractional Reserves and the Money Supply**

▶ With a 20 percent reserve requirement, a $1,000 cash deposit will result in a fivefold expansion of the money supply.

Economic Analysis ***If the initial reserves were $2,000, how large could the money supply get?***



fractional reserve system system requiring financial institutions to set aside a fraction of their deposits in the form of reserves

legal reserves currency and deposits used to meet the reserve requirement

reserve requirement formula used to compute the amount of a depository institution's required reserves

member bank reserve (MBR) reserves kept by member banks at the Fed to satisfy reserve requirements

excess reserves financial institution's cash, currency, and reserves not needed for reserve requirements

ever since. After the FDIC was created, people worried less about the safety of their deposits, reducing the number of runs on banks. If a bank is in danger of collapse today, the FDIC can seize the bank and either sell it to a stronger one or liquidate it and pay off the depositors. If it is sold, the sale is done in secrecy to prevent panic withdrawals or to keep shareholders from selling their worthless stock to unsuspecting investors.

Either way, depositors today have little to fear because they are now covered up to the current $100,000 FDIC insurance limit per customer per bank. If an account holds more than this amount, the depositor may go to court and sue the bank's owners to recover the rest.

Fractional Reserves and Deposit Expansion

The growing popularity of checking accounts in the last century led to the refinement of another important banking practice, the use of fractional bank reserves. Under a **fractional reserve system**, banks are required to keep only a portion of their total deposits in the form of legal reserves. **Legal reserves** consist of coins and currency that banks hold in their vaults, plus deposits at the Fed. The size of the reserves are determined by a **reserve requirement**, the percentage of every deposit that must be set aside as legal reserves. The result is a money supply that is several times larger than the total reserves of the banking system.

To see how this works, let us assume that on Monday, a depositor named Kim opens a demand deposit account (DDA) by depositing $1,000 in a bank that is subject to a 20 percent reserve requirement. We will also assume that no one else has any money, so the size of the entire money supply is also $1,000. **Figure 14.2** illustrates the monetary expansion process that takes place under these conditions.

Because of the 20 percent reserve requirement, $200 of Kim's deposit must be set aside as a reserve in the form of vault cash or in a **member bank reserve (MBR)**—a deposit a member bank keeps at the Fed to satisfy reserve requirements. The remaining $800 of **excess reserves**—legal reserves beyond the reserve requirement—represents the bank's lending power and can be loaned out. At the end of Monday the total money supply in the hands of the public amounts to Kim's $1,000 checking account.

On Tuesday, the bank lends its $800 excess reserves to Bill. Bill decides to take the loan in the form of a DDA so that the

Hands-On Chapter Project

Step 2

Creating a U.S. Currency Time Line

Step 2: Assembling the Time Line. Students will use the information they learned in Step 1 to construct and illustrate a class time line.

Directions: Students will return to the groups they formed in Step 1. Ask them to review the information they selected for inclusion in the time line. Instruct groups to choose an image for each item that they plan to include on the class time line. Explain that these images could depict the types of currency or people using the currency during the historical period in which they were found. Then, as a class, have students determine the dates that their class time line should span and the intervals at which the time line should be divided. When these decisions have been made, have the groups work together to draw a blank time line on a large piece of paper.

Sequencing Direct each group to find the section of time line that corresponds to the historical period they researched. Then have them add their information and illustrations to the time line. **OL**

(Chapter Project continued in Section 3.)

cash never leaves the bank. Even so, the bank treats the new DDA as a new deposit, so 20 percent, or $160, must be set aside as a reserve. This leaves $640 of excess reserves to be lent to someone else. By the end of Tuesday, the total money supply in the hands of the public amounts to $1,800—the sum of Kim's and Bill's DDAs.

On Wednesday, Maria enters the bank and borrows the $640 excess reserves. If she takes the loan in the form of a DDA, the bank treats it as a new $640 deposit, 20 percent of which must be set aside as a required reserve, leaving $512 of excess reserves. By the end of the day, the money supply in the hands of the public (DDAs and cash) has grown to $2,440—the sum of the DDAs owned by Kim, Bill, and Maria. **C**

The $2,440 result would be exactly the same if Maria had borrowed the bank's $640 excess reserves in cash. Had she done so, the money supply in the hands of the public would have consisted of the $1,800 in Kim's and Bill's checking accounts, plus Maria's $640.

However, the money expansion process will now come to a temporary halt until the $640 cash returns to the bank as a deposit. If Maria spends the money, and if the person who receives it opens a new deposit account so that additional excess reserves are created, the expansion process can resume.

This expansion will continue as long as the bank has excess reserves to lend and as long as lenders deposit part or all of that money. In fact, as long as every dollar of DDAs is backed by 20 cents of legal reserves, the total amount of DDAs would be:

$$\frac{\text{Total MBRs}}{\text{Reserve Requirement}} = \frac{\$1{,}000}{.20} = \$5{,}000$$

Some people will use cash, of course, so the DDA component of the money supply may never reach $5,000. Even so, it is clear that fractional reserve banking allows the DDA component of the money supply to grow several times larger than the total amount of member bank reserves.

✓Reading Check **Describing** What is the purpose of the FDIC?

Personal Finance Handbook

*See pages **R14–R15** to learn more about loans.*

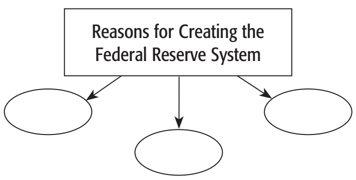
SECTION 2 Review

Vocabulary

1. **Explain** the significance of state bank, legal tender, national bank, national currency, gold certificate, silver certificate, central bank, bank run, bank holiday, fractional reserve system, legal reserves, reserve requirement, member bank reserve (MBR), and excess reserves.

Main Ideas

2. **Describing** How did experiences during and after the Revolutionary War affect banking in the United States?
3. **Listing** Use a graphic organizer like the one below to list the reasons for creating the Federal Reserve System.



Critical Thinking

4. **The BIG Idea** Why did the United States move to a single national currency in the 1860s?
5. **Synthesizing** How does the system of fractional reserves "create" money?
6. **Making Comparisons** How do the operations of a central bank like the Fed compare to the operations of a normal bank?
7. **Analyzing Visuals** Examine the photo on page 394. What weaknesses in the banking system led to the actions pictured in this photo?

Applying Economics

8. **National and State Banks** Interview the branch managers of different banks in your locality. Ask whether the bank is a national bank or a state bank and how that designation affects the bank's operation and relationship with the Fed.

C Critical Thinking

Evaluating Have students explain in their own words how the Fed's policy of fractional reserve banking (set at 20%) can increase the amount of money in the economy by 500%. *(Answers will vary but should note that banks must keep 20% of each deposit and then can to lend out the rest. As borrowers pay back loans, or banks get additional deposits, banks can continue to lend out money.)* **OL**

✓Reading Check Answer: The FDIC protects deposits up to $100,000 per customer per bank.

Assess

Use the Interactive Tutor Self-Assessment CD-ROM to review Section 2, and then assign the Section 2 Review as homework or as an in-class activity.

Close

Speculating Have students speculate on what might happen to the U.S. banking system if the government ordered the Fed to stop all its operations. **OL**

Review SECTION 2

Answers

1. All definitions can be found in the section and the Glossary.
2. People lost confidence in the banking system.
3. The National Banking System was having trouble providing enough currency for the growing nation; checking accounts were becoming more popular, and the banking system was not designed to deal with them; even minor recessions were causing major problems for lending institutions.
4. It needed to finance the Civil War.
5. Banks are required to keep only a portion of their deposits in the form of legal reserves. They may lend any excess reserves. Whether these loan proceeds are immediately deposited or spent on goods and services, they will eventually end up being deposited in a bank. The initial deposit will continue to generate "new" money as long as a bank has excess reserves to lend.
6. Central banks like the Fed are organized as corporations and are owned by national banks and some privately owned banks. They have more resources than other banks and can make loans to other banks.
7. **Possible answers:** unsound banking practices; loan proceeds used to speculate on the stock market or in real estate; lack of deposit insurance; fear of losing money in bank accounts
8. Answers will vary but should discuss the effects of the bank's designation.

Teach

W Writing Support

Expository Writing Share this statement by Fed chairman Ben Bernanke about the Great Depression: " . . . the whole experience of the 1930s clearly shows some of the threats associated with large-scale . . . bank failures, including collapse of the money supply, disruptions of credit extension and other banking services, and blows to confidence." Then have students write a paragraph analyzing how that statement relates to Bernanke's policy of promoting transparency and straightforward communication. **OL**

Examining the Profile

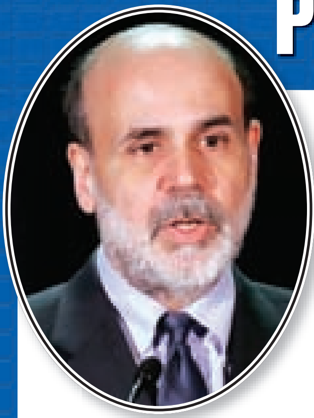
Answers:

1. He promotes transparency and direct communication and views inflation differently.
2. It would build public confidence in the system, which would have a positive affect on financial markets.

Additional Support

ECONOMIST

Profiles in Economics



When his high school did not offer calculus, Ben Bernanke taught it to himself—not an unusual feat for the student with the highest SAT score in his state that year. Bernanke went on to major in economics at Harvard and MIT because he thought it combined math and people.

Ben S. Bernanke (1953–)

- distinguished academic career as an economics professor
- sworn in as chairman of the Federal Reserve Board in 2006

Maestro of the Economy

Before becoming the second most powerful man in America (after the president), Ben S. Bernanke was professor of Economics and Public Affairs at Princeton University. As chair of the Fed, Bernanke now is responsible for U.S. monetary policy. His tenure follows that of Alan Greenspan, Fed chair from 1987 to 2006, who is credited with presiding over the period of greatest economic growth in U.S. history. These are large shoes to fill. Bernanke's academic career, with a focus on monetary policy, prepared him well for the task.

Clear Talk, Clear Target

W Unlike Greenspan, who was known to be vague when reporting his monetary decisions to Congress, Bernanke promotes transparency and straightforward communication. He believes that "as public servants whose policy actions affect the lives of every citizen, central bankers have a basic responsibility" to clearly state reasons for any Fed action. "Fedspeak," as U.S. media and financial markets called earlier central bank talk, was out. Even so, Bernanke learned to be careful about what he says in public. When he mentioned offhand at a dinner party that rising inflation concerned him, the stock market dropped 250 points in two days. Such is the power of the Fed chair's words.

Besides his transparency, Bernanke differs from Greenspan in how he looks at inflation. Rather than relying on hunches, Bernanke wants to base Fed policy on analysis of economic data and predetermined inflation targets. The Fed can then adjust monetary policy to meet those targets. It is a strategy he advocated several years before his appointment, when he wrote that "the Fed needs an approach that consolidates the gains of the Greenspan years and ensures that those successful policies will continue."

Examining the Profile

1. **Contrasting** How does Bernanke differ from his predecessor Greenspan?
2. **Making Inferences** What effect would a more transparent monetary policy have on financial markets?

Extending the Content

Big Shoes to Fill Fed chairman Ben Bernanke was selected to follow a legend as the nation's chief banker. His predecessor was Alan Greenspan, who led the Federal Reserve for 18 years. Greenspan, appointed by President Ronald Reagan, took the wheel of the American economy shortly before the stock market crash of 1987. He led the country back to financial health and guided it through the high-flying days of the 1990s. His aggressive anti-inflation policies earned him harsh criticism from many economists. However, for most of his tenure, the nation experienced a period of sustained economic growth and low inflation.

SECTION 3

The Federal Reserve System and Monetary Policy

GUIDE TO READING

Section Preview

In this section, you will learn how the Federal Reserve System is organized and conducts monetary policy.

Content Vocabulary

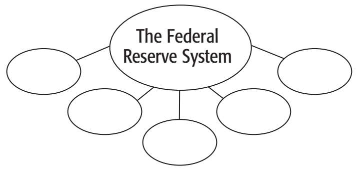
- member bank *(p. 400)*
- monetary policy *(p. 402)*
- interest rate *(p. 402)*
- easy money policy *(p. 402)*
- tight money policy *(p. 402)*
- open market operations *(p. 403)*
- discount rate *(p. 404)*
- prime rate *(p. 404)*
- quantity theory of money *(p. 405)*
- currency *(p. 406)*
- coins *(p. 406)*
- bank holding companies *(p. 407)*
- Regulation Z *(p. 407)*

Academic Vocabulary

- aspects *(p. 401)*
- functions *(p. 401)*

Reading Strategy

Describing As you read this section, complete a graphic organizer similar to the one below by describing the features of the Federal Reserve System.



PEOPLE IN THE NEWS

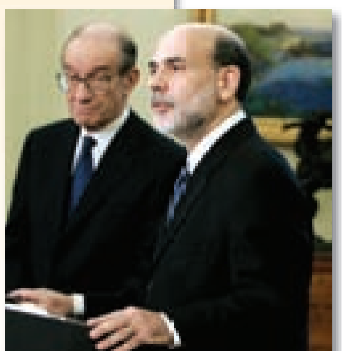
—Associated Press

Fed Raises Rates

The Federal Reserve, in the last major piece of business for retiring chairman Alan Greenspan, pushed borrowing costs to the highest point in nearly five years Tuesday and hinted that another rate increase was possible.

Shortly after the Fed's rate announcement, the Senate [approved] Ben Bernanke's nomination to be the 14th chairman of the central bank. Bernanke, 52, will be sworn in as Fed chief Wednesday morning in a private ceremony at the Fed's marble headquarters.

At Greenspan's final meeting, the Fed boosted the federal funds rate . . . to 4.50 percent. . . . In response, commercial banks raised their prime lending rates . . . by a corresponding amount to 7.50 percent. ■



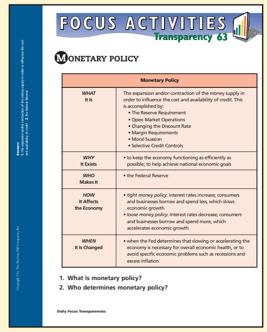
The U.S. economy reached a milestone in early 2006 when Alan Greenspan ended his tenure of over 18 years as Chairman of the Federal Reserve System's Board of Governors. This position is important because the Fed Chair has immense influence over the economy.

The new chairman is Ben Bernanke. As the head of the Fed, he has an unusual degree of independence. Along with other Fed officials and without the approval of elected officials, he can change interest rates to try to speed up the economy when it is growing too slowly, or try to slow it down when it is growing too fast. Like his predecessor, the new chairman will be especially concerned about economic instability, recessions, and inflation.

Focus

Bellringer

Daily Focus Transparency 63



GUIDE TO READING

Answers to Graphic: is privately owned; directed by a board of governors; served by district banks; has a policy-making body; has advisory committees

Resource Manager

R Reading Strategies	C Critical Thinking	D Differentiated Instruction	W Writing Support	S Skill Practice
Teacher Edition • Monitoring, p. 400 • Inferring, p. 401 • Using Context Clues, p. 404	**Teacher Edition** • Drawing Conclusions, p. 401 • Theorizing, p. 403 • Synthesizing, p. 408	**Teacher Edition** • ELL, p. 402 • Visual/Spatial, p. 404 • Kinesthetic, p. 405 • Adv. Learners, p. 406	**Teacher Edition** • Persuasive Writing, p. 403 • Personal Writing, p. 407	**Teacher Edition** • Analyzing Charts, p. 400 • Det. Cause/Effect, p. 402
Additional Resources • Guid. Read. Act., p. 42 • Read. Ess. & Note-Taking Guide, p. 124	**Additional Resources** • Free Enterprise Act., pp. 20, 21 • Econ. Concepts Trans., Strat. & Act., p. 35	**Additional Resources** • Reading and Study Skills Fold., p. 62 • Econ. Cartoons, p. 25	**Additional Resources** • Writer's Guidebook	**Additional Resources** • Daily Focus Trans. 62, 63, 79 • Graph. Org. Trans., p. 17

Teach

R Reading Strategy

Monitoring Make flash cards that detail some aspect of the Federal Reserve System that is described in the section. After students read the section, hold up the flash cards, one at a time, and call on students to identify what aspect of the Fed is being described. If students struggle, direct them to review the text to find the answer. **OL**

S Skill Practice

Analyzing Charts **Ask:** **What are two functions that member banks perform?** *(contribute funds to the 12 district banks and receive stock)* **Who is in charge of deciding monetary policy?** *(the Federal Open Market Committee)* **OL**

Economic Analysis

Answer: It supervises and regulates the Fed.

Additional Support

member bank bank belonging to the Federal Reserve System

R Structure of the Fed

MAIN Idea The Fed is organized as a corporation, owned by its member banks, and directed by a government-appointed board.

Economics and You Does your local school board have advisory committees to help with board decisions? Read on to find out similar advisory committees for the Fed.

The main components of the Fed, shown in **Figure 14.3,** have remained practically unchanged since the Great Depression.

Private Ownership

Skills Handbook
*See page **R51** to learn about **Using Tables and Charts.***

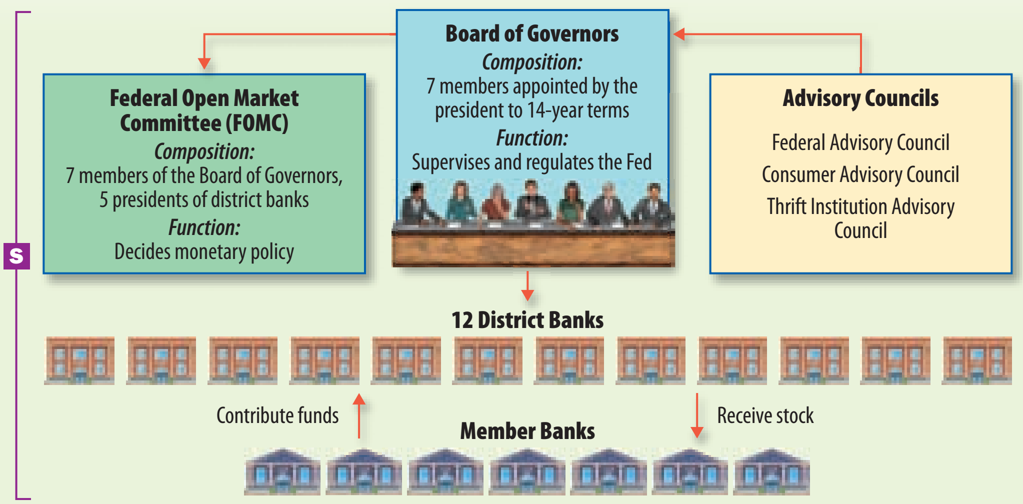
One of the unique features of the Fed is that it is privately owned by its member banks. A **member bank** is a commercial bank that is a member of, and holds shares of stock in, the Fed. National banks—those chartered by the national government—must belong to the Fed. State banks—those receiving their charters from state governments—have the choice to belong or not.

The original decision to make the Fed a stock corporation was a matter of necessity because the government did not have enough money to set up a new banking system. Instead, banks were required to purchase shares when they joined. This made the banks part-owners of the Fed, just as someone might own shares in IBM or Ford Motor Company. Private individuals are not allowed to buy shares in the Fed, although they become indirect owners by buying shares of stock in a Fed-member bank.

Board of Governors

The Fed is directed by a seven-member Board of Governors. Each member is appointed by the president of the United

Figure 14.3 ▸ **Structure of the Federal Reserve System**



▸ The Board of Governors supervises the Federal Reserve System. The FOMC has primary responsibility for monetary policy. Three advisory councils provide direct advice to the Board on a regular basis. The district banks are located throughout the nation near the institutions they serve. Member banks contribute a small amount of funds and receive stock ownership shares in return.

Economic Analysis ***What functions does the Board of Governors perform?***

Charts In Motion See StudentWorks™ Plus or glencoe.com.

Activity: Interdisciplinary Connection

Geography Remind students that legislation establishing the Federal Reserve System with its 12 Federal Reserve District Banks was passed in 1913. Have students work in groups of three to conduct Internet research on the location of the 12 district banks. Then have them create a map illustrating those locations. Next, have students decide how they would change the 12 districts and in which cities they would recommend locating the Federal Reserve District Banks today. Ask each group to write a brief explanation for their recommendations, and create a second map illustrating the changes. Invite volunteers from each group to present their explanation and map to the class. **OL**

States and approved by the Senate to serve a 14-year term of office. The appointments are staggered, so that one appointment becomes vacant every two years. In addition, care is taken to appoint people who will govern the Fed in the public interest. Because of this, it is often said that the Fed is "privately owned, but publicly controlled." R

The Board is primarily a regulatory and supervisory agency. It sets general policies for its member banks to follow and regulates certain **aspects** of state-chartered member banks' operations. It helps make policies that affect the level of interest rates and the general availability of credit. Finally, it reports annually to Congress and puts out a monthly bulletin that covers national and international monetary matters.

District Banks

The Fed was originally intended to operate as a system of 12 independent and equally powerful banks. Each reserve bank was responsible for a district, and some Federal Reserve notes today still have the district bank's name in the seal to the left of the portrait. More recently, advances in technology have minimized the need for a regional structure, so the new Fed seal on our currency does not incorporate any mention of the district banks.

Today the 12 Federal Reserve district banks and their branches are strategically located to be near the institutions they serve. The district banks provide many of the same **functions** for banks and depository institutions that banks provide for us. For example, the district banks accept deposits from, and make loans to, privately owned banks and thrift institutions.

Federal Open Market Committee

The Federal Open Market Committee (FOMC) makes decisions about the level of interest rates. It has 12 voting members: seven members from the Board of Governors, the president of the New York district Fed, and four district Federal Reserve bank presidents who serve one-year rotating terms.

The FOMC meets eight times a year to review the economy and to evaluate factors such as trends in construction, wages, prices, employment, production, and consumer spending. Its decisions have a direct impact on the cost and availability of credit. While decisions are made in private, they are announced almost immediately. The FOMC is the Fed's primary monetary policy-making body.

Advisory Committees

Three advisory committees advise the Board of Governors. The Federal Advisory Council consists of one representative from each of the 12 district banks. It provides advice to the Federal Reserve on matters concerning the overall health of the economy. C

The Consumer Advisory Council's 30 members meet with the Board three times a year to advise on consumer credit laws. Members include educators, consumer legal specialists, and representatives from consumer and financial industry groups.

The third advisory group is the Thrift Institutions Advisory Council, with representatives from savings and loan associations, savings banks, and credit unions. It meets with the Board three times a year to advise on matters pertaining to the Savings and Loan industry.

✓Reading Check **Explaining** What is the purpose of the Federal Open Market Committee?

Did You Know?

The Fed When the Federal Reserve was first established in 1913, the individual states fought over the right to have one of the 12 district banks placed in their state. One state, however, was more equal than all the others and got *two* banks. One bank is located in St. Louis and the other bank is located in Kansas City—but both are located in the state of Missouri. It turns out that a powerful senator by the name of James A. Reed would not let the bill creating the Fed pass the Senate unless his state got two district banks.

R Reading Strategy

Inferring **Ask:** **Why is it said that the Fed is "publicly controlled"?** *(Members are appointed by the president and approved by the Senate, they serve for 14 years, have staggered appointments, and exhibit characteristics of governing the Fed in the public interest.)* **OL**

C Critical Thinking

Drawing Conclusions
Ask: **Why is it important that members of the Federal Advisory Council be from each member bank?** *(Possible answers: They provide insight into the economy of their district. They offer different perspectives on the overall health of the economy.)* **AL**

✓Reading Check **Answer:** It is the Fed's primary monetary policy-making body. It reviews the economy, evaluates factors in economic trends, and makes decisions about the level of interest rates.

Hands-On Chapter Project
Step 3

Creating a U.S. Currency Time Line

Step 3: Evaluating Time Line Entries. Students will work with their groups to evaluate each type of currency identified on the class time line.

Directions: Ask students to resume work in their groups. Have them review the types of currency listed on the class time line according to the characteristics of money discussed in the chapter. After the evaluation is completed, have the groups organize the information on a table according to the type of currency and the characteristics by which the currency was evaluated.

Assessing Ask each group to select one or two representatives to present their finished tables to the class. If groups differ in their assessments of the various types of currency, lead the members of these groups in a discussion until a consensus can be reached. **OL**

(Chapter Project continued in Visual Summary.)

D Differentiated Instruction

English Language Learners
For students who have difficulty understanding the concept of an *interest rate*, explain that interest is the price for a service—the right to use the money. Explain that low interest rates often encourage people to borrow money. **ELL**

S Skill Practice

Determining Cause and Effect **Ask:** **Under what conditions might the Fed want to institute an easy money policy? Why?** *(if economic growth is slow; it expands the money supply to increase business activity)* **Under what conditions might the Fed want to institute a tight money policy? Why?** *(if inflation is rising; it restricts the money supply to slow economic growth)* **OL**

Economic Analysis
Answer: The supply of money is fixed at any given time.

monetary policy actions by the Federal Reserve System to expand or contract the money supply in order to affect the cost and availability of credit

interest rate the price of credit to a borrower

easy money policy monetary policy that results in lower interest rates and greater access to credit

tight money policy monetary policy that results in higher interest rates and restricted access to credit

Conducting Monetary Policy

MAIN Idea Monetary policy involves expanding and contracting the money supply to change the level of interest rates.

Economics and You Have you noticed that prices for some items go up faster than those for others? Read on to learn that inflation is one of the Fed's main concerns.

One of the most important functions of the Fed is to conduct **monetary policy**—changes in the money supply in order to affect the availability and cost of credit. This in turn influences economic activity.

How Monetary Policy Works

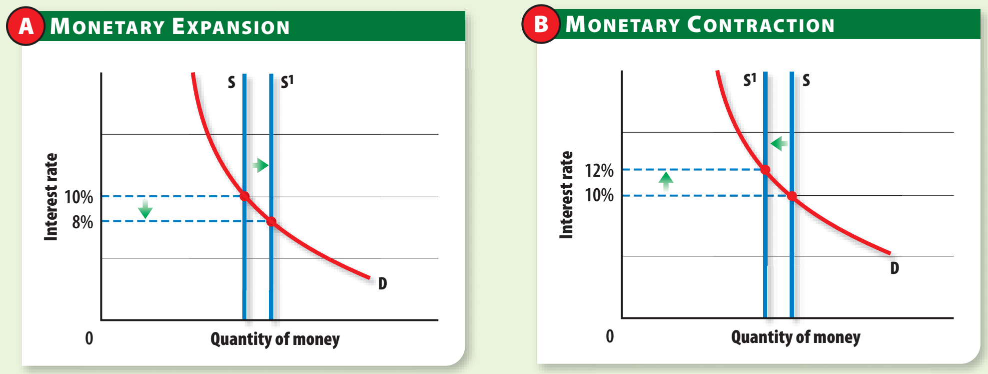
Monetary policy is based on the mechanism of supply and demand. **Figure 14.4** shows that the demand curve for money has the usual shape, which illustrates that more money will be demanded when the **interest rate**, or the price of credit to a borrower, is low. However, the supply curve does not have its usual shape. Instead, its vertical slope indicates that the supply of money is fixed at any given time.

When the Fed conducts its monetary policy, it changes interest rates by changing the size of the money supply. Under an **easy money policy**, the Fed expands the money supply, causing interest rates to fall. Such a policy stimulates the economy because people borrow more at lower interest rates. This is illustrated in **Panel A**, where a larger money supply lowers the rate from 10 to 8 percent.

Under a **tight money policy**, the Fed restricts the size of the money supply. This is shown in **Panel B**, where a contraction of the money supply drives the cost of borrowing up from 10 to 12 percent. This tends to slow economic growth because higher interest rates normally encourage everyone to borrow and spend less.

The Fed can use three major tools to conduct monetary policy. Each tool works in a different way to change the amount of excess reserves—the amount of money a bank can lend to others.

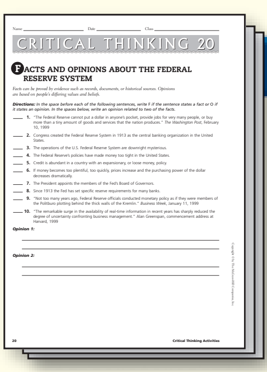
Figure 14.4 ▶ Short-Run Impact of Monetary Policy



▶ In the short run, monetary policy impacts interest rates, or the price of credit. When the money supply expands, the price of credit goes down. When the money supply contracts, the price of credit goes up.

Economic Analysis ***Why is the supply curve of money shown as a vertical line?***

Differentiated Instruction



Critical Thinking Activities, p. 20

Facts and Opinions About the Federal Reserve System

Objective: Identify facts and opinions about the Federal Reserve System.

Focus/Teach: Have volunteers explain the difference between a fact and an opinion, and give examples of each. Then have students complete the activity.

Assess: Go over the answers, explaining why each item is a fact or an opinion.

Close: Have students give a fact and an opinion about the U.S. economy.

Differentiated Instruction Strategies

BL Have students work in groups to find examples of facts and opinions in a newspaper article.

AL Have students rewrite each fact statement as an opinion.

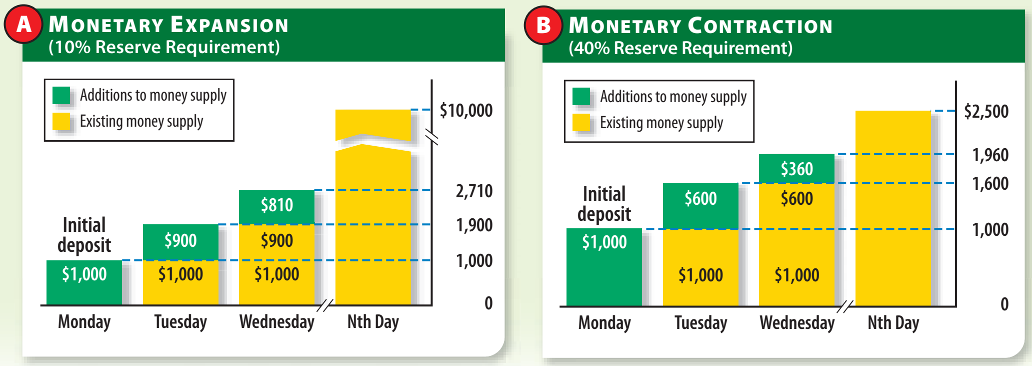
ELL Have one student write a statement. Ask a partner to explain orally why it is a fact or an opinion.

Figure 14.5 ▶ The Reserve Requirement as a Tool of Monetary Policy

▶ The Fed can control the size of the money supply by changing the reserve requirement. A low requirement, such as 10 percent, can be used to expand the money supply. A higher requirement, such as 40 percent, has the opposite effect.

Economic Analysis ***What would be the size of the money supply if the Fed set the reserve requirement at 25 percent?***

Charts In MOtion See StudentWorks™ Plus or glencoe.com.



Reserve Requirement

The first tool of monetary policy is the reserve requirement. Within limits that Congress sets, the Fed can change this requirement for all checking, time, and savings accounts. **W**

For instance, in Figure 14.2 on page 396 we assumed that a 20 percent reserve requirement applied to the DDAs held by Bill, Maria, and other depositors. In the figure, an initial deposit of $1,000 could expand to as much as $5,000 in total bank deposits. However, the Fed could also lower the reserve requirement to 10 percent or increase it to 40 percent.

Figure 14.5 shows the results of such changes with the same initial deposit of $1,000. In **Panel A,** the 10 percent reserve requirement means that $900 of excess reserves could be lent out on the second day, $810 on the third day, and so on. Excess reserves are available until the DDAs reach a maximum of:

$$\frac{\text{Total MBRs}}{\text{Reserve Requirement}} = \frac{\$1{,}000}{.10} = \$10{,}000$$

In **Panel B,** the reserve requirement increases to 40 percent. The result is that $600 of excess reserves are available for the first loan, $360 of excess reserves are available for the second loan, and so on until $2,500 of DDAs are generated.

Historically, the Fed has been reluctant to use the reserve requirement as a policy tool, in part because other monetary policy tools work better. Even so, the reserve requirement can be powerful should the Fed decide to use it. **C**

Open Market Operations

The second tool of monetary policy is **open market operations**—the buying and selling of government securities in financial markets. This method is the Fed's most popular tool and allows the Fed to influence short-term interest rates.

Suppose the Fed wants to expand the money supply. All it has to do is buy a bond from an investor and pay for it with a check drawn on itself or an equivalent amount of cash. When the money is put in a bank, the

open market operations sales or purchases of U.S. government securities by the Fed

W Writing Support

Persuasive Writing Have students write a letter to the editor of the local newspaper arguing for a rise or a drop in the Fed's reserve requirement. If necessary, give students an editorial letter to follow as a model. Remind them to support their opinions with facts. **OL**

C Critical Thinking

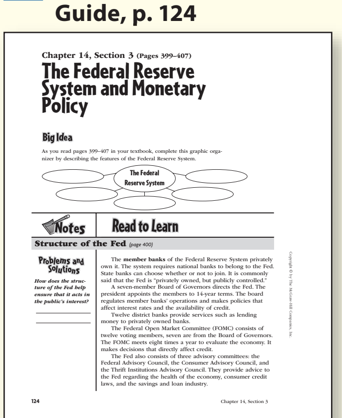
Theorizing Ask: Why do you think that other monetary policy tools work better than the reserve requirement? *(Possible answer: It may be difficult to predict the amount of change to make, and it takes time for the changes to take effect.)* **AL**

Economic Analysis

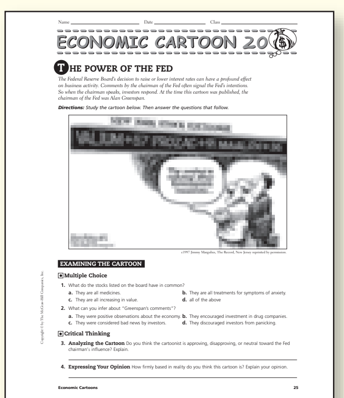
Answer: $4,000

Leveled Activities

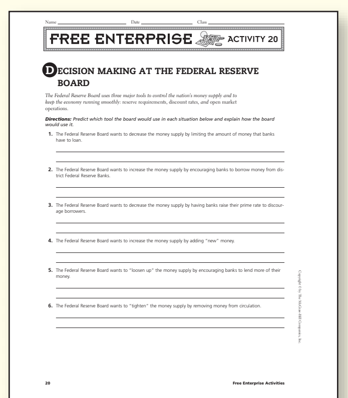
BL Reading Essentials and Note-Taking Guide, p. 124



OL Economic Cartoons, p. 25



AL Free Enterprise Activities, p. 20



Teach

D Differentiated Instruction

Visual/Spatial Have students use computer software to make a table, chart, or other graphic aid that explains how the Fed increases or decreases the money supply using open market operations. Ask students to share their graphic aids in a class discussion. **OL**

R Reading Strategy

Using Context Clues

Ask: What does *prime* mean in the term *prime rate*? Why is it used in this context? (*Prime means "first in importance." Banks' best customers, in terms of their ability to repay the loan, are given the prime rate.)* **OL**

Caption Answer: The discount rate is set by the Fed, and any changes directly affect the prime rate, which in turn affects other interest rates.

discount rate interest rate that the Federal Reserve System charges on loans to the nation's financial institutions

prime rate lowest rate of interest rate that banks charge their best customers

bank will have additional excess reserves and the loan expansion process can begin. The result is that whenever the Fed *buys* government securities, excess reserves are created and the money supply *expands*.

D Suppose the Fed were to sell some of its government securities. When a buyer takes money out of the banking system to pay for the securities, member bank reserves go down, forcing the money supply to contract. A smaller money supply, as we saw in Panel B of Figure 14.4, raises the interest rate. In the end, whenever the Fed *sells* government securities, excess reserves contract and the money supply *contracts*.

In practice, every day the Fed buys and sells billions of dollars of government securities through dealers. The Fed pays for the securities by writing checks drawn on itself. The dealers deposit the checks in their banks—thereby creating excess reserves. If the Fed sells securities, it accepts checks from the dealers, which reduces both dealers' bank deposits and member banks' reserves.

The Federal Open Market Committee (FOMC) is the part of the Fed that conducts open-market operations. Normally the FOMC decides whether interest rates are too high, too low, or just right. After the committee votes to set targets, officials at the trading desk take over. The trading desk at the Fed's New York district bank is the physical location where the daily buying and selling actually occurs. It is permanently located in New York to be close to the nation's major financial markets.

Discount Rate

As a central bank, the Fed makes loans to other depository institutions. The **discount rate**—the interest the Fed charges on loans to financial institutions—is the third major tool of monetary policy. Only financial institutions can borrow from the Fed; private individuals and companies are not allowed to do so.

The discount rate is the price of credit for an institution that borrows from the Fed. If the discount rate goes up, fewer banks will want to borrow from the Fed, and banks will have fewer excess reserves available to loan out. If the Fed wants to expand the money supply, it might lower the rate to encourage additional borrowing, thus increasing excess reserves.

A bank may want to borrow from the Fed if it has an unexpected drop in its required reserves. A bank could also have high seasonal demands for loans. For example, a bank in an agricultural area might face a heavy loan demand during the planting season. In either case, a short-term loan from the Fed could restore its reserves.

Discount Rate The Fed monitors consumer behavior so it knows when to adjust the money supply with tools such as the discount rate and open market operations. ***Why do changes in the discount rate affect the prime rate and most other interest rates?***

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The leading economic indicator the Fed watches to know when to raise interest rates is you.

Effects on Other Interest Rates

R While the Fed directly sets only one interest rate—the discount rate—its monetary policy actions influence other interest rates. For example, changes can directly affect the **prime rate**—the lowest rate of interest commercial banks charge their best customers. At many large banks, the prime rate is linked to other interest rates, so the banks usually adjust

Additional Support

Activity: Hands-On Economics

Simulating Conduct the following simulation of open market operations. Organize students into two groups to represent the public and the Fed. Give 10 slips of paper, each representing $1,000, to each member of the public. Count the money and record the total amount in circulation on the board. Next, give 10 whole sheets of paper, each one depicting a $1,000 bond, to each person representing the Fed. Announce that a new issue of bonds is available for purchase at a good interest rate from the Fed. Have the public buy some. Count and record the money in circulation. Ask the class what happened to the money supply. (*decreased)* Next, have the Fed buy back some of the bonds. Count and record the money now in circulation among buyers. Ask students what has happened to the money supply. (*increased)* Have students explain open market operations in their own words. **OL**

Figure 14.6 ▶ Monetary Policy Tools

▶ The key to understanding monetary policy is to see how the excess reserves in the system are affected.

Economic Analysis ***How does the Fed use the reserve requirement to affect the money supply?***

Summary of Monetary Policy Tools

Tool	Fed Action	Effect on Excess Reserves	Money Supply
Reserve requirement	Lower	Frees excess reserves because fewer are needed to back existing deposits in the system.	Expands
	Raise	More reserves are required to back existing deposits. Excess reserves contract.	Contracts
Open market operations	Buy securities	Checks written by the Fed add to reserves in the banking system.	Expands
	Sell securities	Checks written by buyers are subtracted from bank reserves. Excess reserves in the system contract.	Contracts
Discount rate	Lower	Additional reserves can be obtained at lower cost. Excess reserves expand.	Expands
	Raise	Additional reserves through borrowing are now more expensive. Excess reserves are not added.	Contracts

D

their prime rate up or down whenever the Fed changes the discount rate.

Changes in monetary policy spill over to almost all other interest rates as well. Any tightening of the money supply will affect the interest rate on home mortgages, savings bonds, certificates of deposits, and even Treasury bills and bonds.

Monetary Policy Dilemmas

The impact of monetary policy on the economy is complex. The problem is that we never know for sure how long it will take for a particular policy to take effect. As a result, it is often difficult for the Fed to please everyone.

For example, some people blamed the 2001 recession on the Fed's tight money policy of 2000. The Fed was worried about inflation and raised interest rates to slow the economy. When the economy went into recession in 2001, the Fed acted quickly to reverse itself and lower interest rates to stimulate GDP. The economy responded slowly, though, and the unemployment rate took unusually long to recover.

In the long run, the money supply also affects the general price level. If the money supply were to expand for a prolonged period of time, we would have too many dollars chasing too few goods, and demand-pull inflation would result. This is the basis for the **quantity theory of money**, and it often has been observed in history.

When the Spanish brought gold and silver back to Spain from the Americas in the 1700s, the increase in the money supply started an inflation that lasted for 100 years. During the Revolutionary War, the economy suffered severe inflation when the Continental Congress issued $250 million of currency. The country saw similar effects during the Civil War when the Union printed nearly $500 million of greenbacks. As a result, the Fed normally proceeds with a great deal of caution.

✓Reading Check **Examining** Why does the Fed use open market operations?

quantity theory of money hypothesis that the supply of money directly affects the price level over the long run

Teach

D Differentiated Instruction

Kinesthetic Organize students into several groups to role-play members of the Federal Reserve Board of Governors. Tell half the groups that they must decide on a policy to expand the money supply and the other half to develop a policy to restrict the growth of the money supply. Have groups consider the following: *What tools of monetary policy should be used? How should they be used? Why should they be used?* Call on group representatives to explain their plans to the class. **OL**

Economic Analysis

Answer: They lower the reserve requirement to expand the money supply and raise it to contract the money supply.

✓Reading Check **Answer:** It is a quick, relatively easy way to expand or contract the money supply.

Additional Support

Activity: Collaborative Learning

Predicting Consequences Tell students that at the end of 1999, some people feared that the Y2K problem would affect depositors' ability to withdraw money from their banks. The Y2K problem affected older computer systems, which used just the last two digits of the year ('99) instead of the full four digits (1999). Some people worried that bank computers would think the year 2000 was the year 1900. Some people planned to withdraw their money before the end of 1999. However, most banks fixed their computers by the end of 1999 and reassured the public, so few people withdrew their money. Ask students to predict what would have happened if most people had withdrawn their money from banks. Have students present radio news reports about the consequences of widespread withdrawals of money from most banks. **OL**

Teach

D Differentiated Instruction

Advanced Learners Tell students that most Fed district banks shred old money when they take it out of circulation. It is sometimes used for bookmarks, filler for paperweights, and so on. Have students agree on a class project or fund-raiser that would utilize free shredded currency. Then have volunteers call their local Fed bank and ask if their class can have shredded money for their specific class project. **AL**

Caption Answer: They work with agencies in the payment system, establish specific guidelines governing banking behavior, implement consumer legislation, and provide financial services to the federal government and its agencies.

currency paper component of the money supply, today consisting of Federal Reserve notes

coins metallic forms of money such as pennies, nickels, dimes, and quarters

Other Fed Responsibilities

MAIN Idea As the nation's central bank, the Fed is responsible for most aspects of banking and the payments system.

Economics and You Have you ever bought anything on credit and seen the loan information disclosed to you by the merchant? Read to learn how the Fed helped provide this information.

The Federal Reserve has other responsibilities as well. These include maintaining the money supply and the payments system, regulating and supervising banks, preparing consumer legislation, and serving as the federal government's bank.

Maintaining the Money Supply

Today's **currency**, the paper component of the money supply, is made up of Federal Reserve notes that are printed by the U.S. Bureau of Engraving and Printing. This currency, issued in amounts of $1, $2, $5, $10, $20, $50, and $100, is distributed to the Fed's district banks for storage until it is needed by the public.

Money Today's bills are printed on large sheets of paper. They undergo extensive inspection before being cut up for circulation. ***What are other Fed responsibilities?***

The Bureau of the Mint produces **coins**—metallic forms of money—such as pennies, nickels, dimes, quarters, and the new presidential dollar coin. After the coins are minted, they are shipped to the Fed district banks for storage. When member banks need additional coins or currency, they contact the Fed to fulfill their needs.

D When banks come across coins or currency that are mutilated or cannot be used for other reasons, they return them to the Fed for replacement. The Fed then destroys the old money so that it cannot be put back into circulation.

Maintaining the Payments System

The payments system involves more than the money supply. It also covers the electronic transfer of funds between businesses, state and local governments, financial institutions, and foreign central banks. In addition, specialized operations called clearinghouses process the billions of checks that are written every year. The Fed works with all of these agencies to ensure the payments system operates smoothly.

Next to cash, checks are the most popular form of payment in the United States. A 2003 law, however, has changed the way checks are processed. Whereas checks used to be returned to the person who originally wrote them, now only electronic images of the checks are returned to the issuer.

Online banking is another major innovation in the banking system. Now that people can open an account anywhere in the country using the Internet, the Fed is designing new procedures to make sure that no abuses occur.

Regulating and Supervising Banks

The Fed is responsible for establishing specific guidelines that govern banking behavior. It also has the responsibility for monitoring, inspecting, and examining various banking agencies to verify that they comply with existing banking laws.

Additional Support

Activity: Collaborative Learning

Evaluating On the board, write the following responsibilities of the Fed: *Conducting Monetary Policy*, *Maintaining the Money Supply*, *Maintaining the Payments System*, *Regulating and Supervising Banks*, *Preparing Consumer Legislation*, and *Acting as the Government's Bank*. Ask students to give an example of each Fed responsibility, and note their responses on the board under the appropriate heading. Then organize the class into groups of equal size. Have group members discuss which of the Fed's responsibilities they believe is most important to the U.S. economy and why. Call on group representatives to report and explain their group's decision. **OL**

As a result, the Fed is charged with watching over foreign branches of its own member banks, as well as U.S. branches of foreign-owned banks. The Fed also has jurisdiction over many activities of state banks. This includes the operations of **bank holding companies**—firms that own and control one or more banks.

Preparing Consumer Legislation

The Fed is responsible for implementing some consumer legislation, such as the federal Truth in Lending Act, which requires sellers to make complete and accurate disclosures to people who buy on credit. Under **Regulation Z**, the Fed has the authority to extend truth-in-lending disclosures to millions of individuals who borrow from retail stores, automobile dealers, banks, and lending institutions.

If you buy furniture or a car on credit, for example, you will discover that the seller must explain several items before **W** you make the purchase. These items include the size of the down payment, the number and size of the monthly payments, and the total amount of interest over the life of the loan. All of the disclosures that the seller makes were determined by the Fed.

Acting as the Government's Bank

A final Fed function is the range of financial services it provides to the federal government and its agencies. For example, the Fed conducts nationwide auctions of Treasury securities. It also issues, services, and redeems these securities on behalf of the Treasury. In the process, it maintains numerous demand deposit accounts for the Treasury.

The Fed also maintains accounts for the government. In fact, any check written to the U.S. Treasury is deposited in the Fed. Any federal agency check, such as a monthly Social Security payment, comes from accounts held at the Fed. In essence, the Fed serves as the government's bank.

✓Reading Check **Summarizing** How does the Fed regulate banks?

bank holding company company that owns and controls one or more banks

Regulation Z provision extending truth-in-lending disclosures to consumers

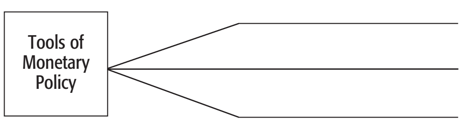
SECTION 3 Review

Vocabulary

1. **Explain** the significance of member bank, monetary policy, interest rate, easy money policy, tight money policy, open market operations, discount rate, prime rate, quantity theory of money, currency, coins, bank holding companies, and Regulation Z.

Main Ideas

2. **Listing** What are the components of the Federal Reserve System?
3. **Describing** What are the additional responsibilities the Fed has beyond monetary policy?
4. **Identifying** Use a graphic organizer like the one below to identify the tools of monetary policy.



Critical Thinking

5. **The BIG Idea** Why and how does the Fed conduct monetary policy?
6. **Contrasting** How do "tight money" and "easy money" impact the economy?
7. **Drawing Conclusions** What are the advantages of having the Fed oversee the U.S. banking system?
8. **Analyzing Visuals** Look at Figure 14.4 on page 402. What would happen if supply shifted to the right? To the left? Why?

Applying Economics

9. **Truth-in-Lending Laws** Visit any local store that sells goods on credit, such as appliances, cars, or furniture. Ask the owner or manager about the type of information that the store is required to disclose when the sale is made. Obtain copies of the disclosure forms and share the disclosure details with your classmates.

W Writing Support

Personal Writing Have students write a paragraph describing one way that they have been affected personally by the activities of the Federal Reserve. Refer them to the discussion of consumer legislation on this page. **OL**

✓Reading Check **Possible Answer:** They establish specific guidelines that govern banking behavior, examine banking agencies to verify their compliance with banking laws, and oversee foreign branches of member banks and activities of state banks.

Assess

Use the Interactive Tutor Self-Assessment CD-ROM to review Section 3, and then assign the Section 3 Review as homework or as an in-class activity.

Close

Describing Have students name and describe the three major tools that the Fed uses to conduct monetary policy. **OL**

Review SECTION 3

Answers

1. All definitions can be found in the section and the Glossary.
2. 12 district banks, Board of Governors, FOMC, Federal Advisory Council, Consumer Advisory Council, Thrift Institutions Advisory Council
3. maintaining the money supply and the payments system, regulating and supervising banks, preparing consumer legislation, and serving as the federal government's bank
4. reserve requirement; open market operations; discount rate
5. By lowering the reserve requirement or discount rate and buying government securities, the Fed increases the money supply, which stimulates the economy. By raising the reserve requirement or discount rate and selling government securities, the Fed decreases the money supply, which slows the economy.
6. Tight money contracts the money supply and increases the cost of credit. Most people/businesses react by borrowing less, so the economy slows. Easy money expands the money supply, reducing the cost of credit. Most people/businesses react by borrowing more, so the economy grows.
7. Answers may vary but should recognize that the application and enforcement of rules and regulations benefits the nation.
8. If the curve shifts right, interest rates will decrease. If the curve shifts left, interest rates will increase.
9. Answers will vary but should include disclosure information from a local store.

BusinessWeek

Teach

C Critical Thinking

Synthesizing **Why might using inflation expectations to determine monetary policy be problematic?** *(Possible answer: Consumers may not be truthful with pollsters.)* **AL**

BusinessWeek ONLINE

To find up-to-date news and analysis on the economy, business, technology, markets, entrepreneurs, investments, and finance, have students search feature articles and special reports on the BusinessWeek Web site, www.businessweek.com.

Examining the Newsclip

Answers:

1. the beliefs about how fast prices will rise in the future
2. If people believe that inflation will stay low, the Fed plans to relax monetary policy and vice versa.

BusinessWeek NEWSCLIP

As head of the Federal Open Market Committee (FOMC), the Fed chair monitors a number of economic indicators to help him make decisions on monetary policy. One of these indicators is the rate of inflation. The chairman also likes to watch something new these days: inflation expectations.

Inflation: What You Foresee Is What You Get

What . . . are inflation expectations, anyway? You won't find the term in any of the major economic data releases put out by the government. Yet whether inflation expectations are rising or falling may turn out to be a critical factor in determining how far and how fast the Federal Reserve raises interest rates.

That, at least, is the new line coming out of the Fed these days. Inflation expectations—a bit of a touchy-feely concept—represent the beliefs of consumers, investors, corporate execs, and economists about how fast prices will rise in the future. To new Fed Chairman Ben S. Bernanke, inflation expectations are a key indicator. If people believe inflation will stay low, the Fed can afford to relax a bit. But if the masses start anticipating faster inflation, the odds are greater that the Fed will need to hit them with higher rates even if actual price hikes remain moderate. . . .

How are beliefs about future inflation measured? One way is to ask economists what they think is going to happen. According to the Philadelphia Fed's Survey of Professional Forecasters, economists expect consumer inflation to average 2.5% over the next 10 years, only a tad above their 2.45% forecast of a year earlier. That's not very worrisome.

Another way to judge expectations is to look at the behavior of investors—in particular, the people who buy [s]ecurities . . . which are indexed to inflation to give investors a fixed real return. . . .

C The danger, of course, is that expectations about future prices might jump, forcing the Fed to raise rates sharply to maintain its credibility as an inflation fighter. That's what happened in the 1970s, when the public's lack of faith in the Fed's inflation-fighting resolve sent prices—and expectations of future inflation—spiraling out of control after the oil shock.

Contrast that with [the situation] today. The Fed has built credibility by both aggressively fighting inflation and communicating its commitment to price stability. As a result, even as energy prices skyrocketed in recent years, inflation expectations hardly budged, and non-energy inflation stayed relatively low.

—Reprinted from *BusinessWeek*

University of Michigan Inflation Expectation

Source: Survey Research Center: University of Michigan

Examining the Newsclip

1. **Defining** How does the author of the article define inflation expectations?
2. **Analyzing** Why are inflation expectations important to the Fed?

Additional Support

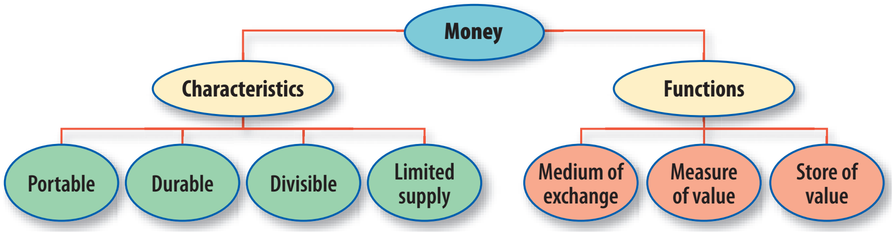
Activity: Hands-On Economics

Identifying Central Issues What are the inflation expectations of people in your community? Have the class write an opinion poll designed to gauge the inflation expectations of teens and adults in the community. Then organize the class into groups of three, and have them ask people to participate in the opinion poll. After groups have gathered the data, have them create a visual to illustrate the results of their poll. Ask each group to explain their visual to the class. Then have students discuss this question as a class: *What recommendations would you make to the Fed chairman based on these results?* **OL**

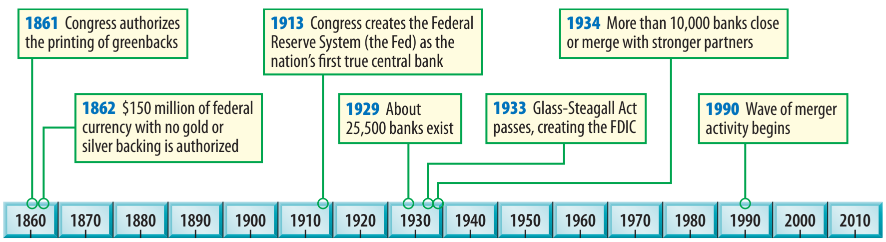
Visual Summary

Study anywhere, anytime! Download quizzes and flash cards to your PDA from glencoe.com.

Money People began using money because it made buying and selling easier than barter.



Development of Modern Banking Problems with the money supply before 1914 led to the creation of the Federal Reserve System.



Monetary Policy The Federal Reserve System has three main policy tools at its disposal. It uses these tools to affect the money supply and interest rates.

Summary of Monetary Policy Tools

Tool	Fed Action	Effect on Excess Reserves	Money Supply
Reserve requirement	Lower	Frees excess reserves because fewer are needed to back existing deposits in the system.	Expands
	Raise	More reserves are required to back existing deposits. Excess reserves contract.	Contracts
Open market operations	Buy securities	Checks written by the Fed add to reserves in the banking system.	Expands
	Sell securities	Checks written by buyers are subtracted from bank reserves. Excess reserves in the system contract.	Contracts
Discount rate	Lower	Additional reserves can be obtained at lower cost. Excess reserves expand.	Expands
	Raise	Additional reserves through borrowing are now more expensive. Excess reserves are not added.	Contracts

Visual Summary

CHAPTER 14

Identifying Call students' attention to the portion of the web diagram listing characteristics of money. Discuss with students the meaning of each characteristic listed in the green ovals. Then ask students to write a paragraph in which they explain how the money used in the United States meets each of these characteristics. **OL**

Determining Cause and Effect Ask students to speculate on when most borrowing is done. *(Students should recognize that most borrowing occurs when interest rates are low.)* Then lead a class discussion on how consumer borrowing affects the Fed's decisions to use a policy tool. **Ask:** **What tools might the Fed use to slow consumer borrowing?** *(Possible answer: open market operations to lower bank reserves or the discount rate to raise the interest rate)* **Ask:** **What tools might the Fed use to encourage consumer borrowing?** *(Possible answer: open market operations to add to bank reserves or the discount rate to lower the interest rate)* **OL**

Hands-On Chapter Project

Step 4: Wrap Up

Creating a U.S. Currency Time Line

Step 4: Putting It All Together. Students will synthesize what they learned in the previous steps.

Directions: Ask students to review the work they have completed throughout the chapter project. Encourage them to revisit their initial research, as well as the class time line and the tables they created in Step 3. After students review these materials, have each group discuss the ways in which currency has evolved throughout the history of the United States. Encourage them to give special consideration to ways in which the monetary system has improved.

Inferring Ask students to use their conclusions to write a brief paper in which they make inferences about how currency in the United States may continue to change in the near future. **OL**

ExamView® Assessment Suite

This easy-to-use software includes extensive question banks and allows you to create fully customized tests that can be administered in print or online.

Review Content Vocabulary

1. b
2. d
3. g
4. e
5. h
6. a
7. f
8. c

Review Academic Vocabulary

9. e
10. c
11. b
12. f
13. d
14. a

Review the Main Ideas

15. portable, reasonably durable, easily divisible, in limited supply
16. because the products were not always acceptable or easy to divide for payment
17. **Possible answer:** Colonial—commodity (tobacco, gunpowder, corn, hemp). Revolutionary—fiat (Continentals). Civil War—fiat (greenbacks). Post-Civil War—fiat (gold certificates, silver certificates).
18. M1 relates to money's function as a medium of exchange. M2 relates to money's function as a store of value.
19. hundreds of different kinds of notes circulated in any given area; merchants might not accept certain notes; no stability in money supply; easy to counterfeit
20. to finance the war and give people confidence in the banking system
21. to insure customer deposits in the event of a bank failure

Assessment & Activities

Review Content Vocabulary

Write the key term that best completes the following sentences.

- **a.** fiat money
- **b.** central bank
- **c.** Regulation Z
- **d.** easy money policy
- **e.** excess reserves
- **f.** M1
- **g.** barter economy
- **h.** open market operations

1. The Fed serves as the _____ of the United States.
2. A(n) _____ would expand the money supply and tend to lower interest rates.
3. In a _____ people rely on trade to obtain goods and services.
4. If a bank has _____ , it is able to make additional loans to customers.
5. The most popular and effective tool of monetary policy is that of _____.
6. _____ is money that must be accepted by government decree.
7. _____ is the component of the money supply that acts as a medium of exchange.
8. _____ gives the Fed the authority to extend truth-in-lending disclosures to consumers.

Review Academic Vocabulary

Match the terms on the left with their synonyms on the right.

9. aspect
10. clause
11. converted
12. function
13. initially
14. revolution

- **a.** major change, transformation
- **b.** altered, revised
- **c.** stipulation, provision
- **d.** originally, in the beginning
- **e.** situation, condition
- **f.** purpose, duty

Review the Main Ideas

Section 1 *(pages 383–388)*

15. **Describe** the characteristics of money.
16. **Explain** why trade was difficult in a barter system.
17. **Identify** and provide examples of the types of money used in different periods of American history by using a graphic organizer like the one below.

History of American Money		
Time period	Type of money	Example(s)

18. **Compare** M1 and M2.

Section 2 *(pages 390–397)*

19. **Identify** the problems that existed with pre–Civil War currency.
20. **Explain** why the National Banking System was created during the Civil War.
21. **Explain** why the U.S. government created the Federal Deposit Insurance Corporation.

Section 3 *(pages 399–407)*

22. **Describe** the role of the Board of Governors of the Fed.
23. **Explain** why member banks borrow from the Fed.
24. **Describe** the three major tools of monetary policy available to the Fed.
25. **Discuss** how the reserve requirement allows the money supply to expand.

Critical Thinking

26. **The BIG Idea** How does regulating the U.S. banking system reflect our concern about balancing monetary policies with a free enterprise economy?
27. **Making Inferences** How did the popularity of checking accounts lead to the expansion of a fractional reserve system?

22. It sets general policies for the member banks, regulates certain operations of state-chartered member banks, conducts some aspects of monetary policy, and provides reports to Congress.
23. when they have unexpected drops in their required reserves and borrow to meet the requirement; when high seasonal demands for loans require additional excess reserves
24. Answers will vary, but students should describe reserve requirement, open market operations, and discount rate.
25. by freeing excess reserves (fewer are needed to back existing deposits in the system)

Critical Thinking

26. A free enterprise economy is founded on the principle of private ownership. The Fed is owned by its member banks, not by any part of the federal government.
27. It increased deposits, which expanded the fractional reserve system.

Economics ONLINE **Self-Check Quiz** Visit the *Economics: Principles and Practices* Web site at glencoe.com and click on *Chapter 14—Self-Check Quizzes* to prepare for the chapter test.

28. **Determining Cause and Effect** At times, someone with a good credit rating may not be able to get a loan. When this happens, the potential customer may be told to try again in the near future. What does this tell you about the bank's reserves? How should the customer react to a situation like this?
29. **Predicting** Our money supply, as well as the different forms of money and ways to hold it, has changed considerably over the years. Describe one or two ways you think American money might change even more in the future.
30. **Determining Cause and Effect** Why do business cycles make it difficult to time monetary policy?
31. **Drawing Conclusions** Defend or refute the following statement: The independence of the Federal Reserve System is essential to the health of the economy.
32. **Evaluating** The FDIC insures deposits up to $100,000. What would you do if you had $400,000 you wanted to deposit and insure?

Thinking Like an Economist

33. You have been invited to speak to your school's PTA to explain how actions of the Federal Reserve impact the economy and individuals. Prepare a chart like the one below to illustrate your presentation.

Fed's Action	Impact on Money Supply	Impact on the Economy	Impact on You
Increase reserve requirement			
Sell securities			
Reduce discount rate			
Buy securities			
Lower reserve requirement			

Interpreting Cartoons

34. **Critical Thinking** What point is the cartoonist making about the relationship between the Chairman of the Board of Governors of the Federal Reserve and the performance of the stock market?

Michael Ramirez/Copley News Service

Applying Economic Concepts

35. **Fractional Bank Reserves** Your local bank is required to keep its reserves in the form of vault cash and member deposits with the Fed. Why do you suppose that other assets, such as common stocks or real estate, are not suitable reserves?
36. **Barter** Assume that you live in a barter society. Compile a list of 10 items that you use frequently, and then identify alternative goods of comparable worth that you would be willing to trade for them.

Analyzing Visuals

37. Look at Figure 14.5 on page 403. How do the differences in the panels reflect the expansion or contraction of the money supply?

Economics ONLINE

Have students visit the Web site at glencoe.com to review Chapter 14 and take the **Self-Check Quiz.**

28. Answers may vary but should include that a bank would deny loans to good customers only if it did not have sufficient reserves to cover the loan.
29. Answers will vary but should discuss the functions and characteristics of money.
30. Business cycles follow no set pattern.
31. Answers will vary but should reflect knowledge of the independence of the Fed.
32. **Possible answers:** divide the money between different banks; create joint accounts with spouse or children; set up trust or retirement accounts

Thinking Like an Economist

33. **Possible answer:** Increase reserve requirement: decrease; slow; possibly harder to get job. Sell securities: decrease; slow; more expensive to buy items on credit. Reduce discount rate: increase; stimulate; easier/cheaper to get credit. Buy securities: increase; stimulate; possibly more available jobs. Lower reserve requirement: increase; stimulate; easier/cheaper to get credit.

Interpreting Cartoons

34. The actions and comments of the Fed chairman can cause strong reactions on Wall Street.

Applying Economic Concepts

35. The value of common stocks and real estate are subject to unpredictable changes in value and therefore are not suitable as reserves.
36. Answers will vary but should indicate an understanding of the bartering system.

Analyzing Visuals

37. The expansion or contraction of the money supply is reflected in the differences in the reserve requirement. Panel A has a 10 percent reserve requirement and reflects greater contraction of the money supply. Panel B has a 40 percent reserve requirement and reflects greater expansion of the money supply.