### **Chapter 3**

# Louisiana's Economy

Pages 70-101

### **Section 1**

**Basic Economic Concepts Pages 73-78** 

### **Section 2**

Louisiana's Economic History Pages 79-82

### **Section 3**

Louisiana's Resources
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### **Section 4**

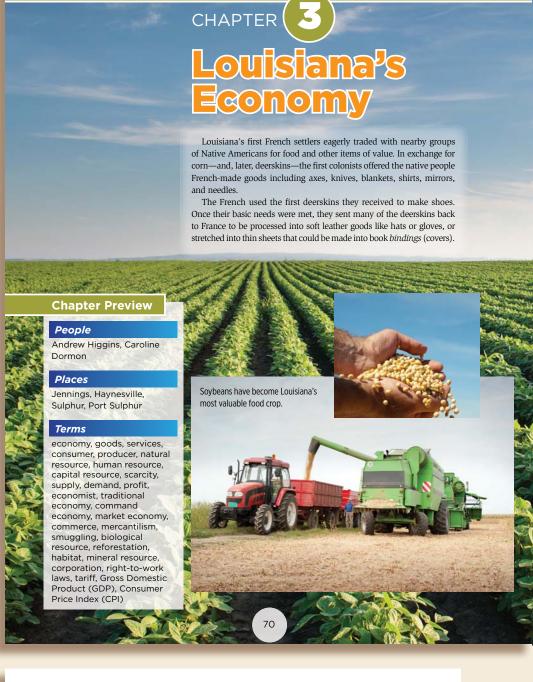
Louisiana's Modern Economy Pages 93-99

### **Chapter Review**

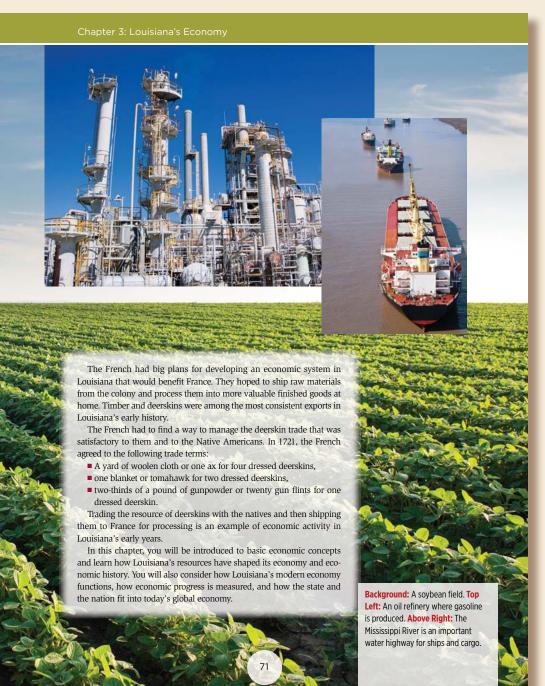
Pages 100-101

### **Higher Level Thinking**

What does the first paragraph tell you about the Native American economy? (Native Americans used a bartering system; Native Americans were skilled hunters and farmers, but their traditional economy did not produce as many finished goods.)



Notes		



### **Did You Know?**

During the French colonial period, Native Americans hunted deer in part because deer provided for many of their basic necessities, such as these:

- The antler was used as a tool to sharpen the edge of arrowheads.
- The bladder was used as a waterproof canteen.
- The bones were used for making buttons and awls (needles).
- The hair was used for lining the inside of moccasins.
- The hooves were boiled to make glue.
- The meat was used for food.
- The rawhide was used for leggings, cloaks, and quivers for arrows.
- The sinew was used for sewing and bowstring.

**NOTE:** Websites appear, disappear, and change addresses constantly. The Internet addresses included throughout this program were operative when the text was published.

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### **Discussion**

Ask students: How many of you have seen one or more of the following feature films?

- 21 Jump Street
- Big Momma's House 2
- The Curious Case of Benjamin Button
- Déjà Vu
- The Dukes of Hazzard
- Glory Road
- The Guardian

Then, inform your students that a portion of each of these movies was filmed in Louisiana.

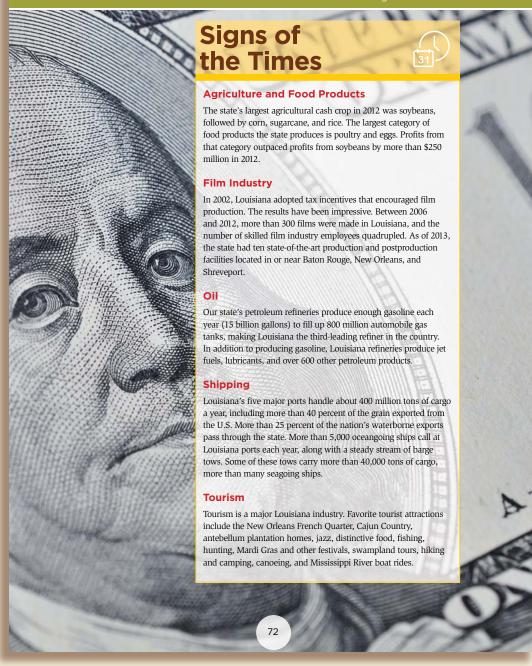
### **Did You Know?**

In 2012, over \$700 million was spent in certified film production in Louisiana.

### **Engagement**

Ask students to survey three friends or family members to find out each person's top five Louisiana tourist attractions. The locations can be places they have visited, or just places they have heard about and would like to visit. Have each student add his or her own "top five" to their survey.

Does the class see any trends in the Louisiana lists? What are the most popular places? Did adults choose differently from students?



### **Social Studies Standard 9— Resources**

Students analyze Louisiana's natural, human, and capital resources and their connection to the past and present economy.

- 8.9.1 Analyze the role of specialization in Louisiana's economy
- **8.9.2** Apply the laws of supply and demand to demonstrate the effects on Louisiana products and resources
- **8.9.3** Analyze and explain factors affecting the production and allocation of goods and services in Louisiana, the United States, and the world

### **Section 1**

# Basic Economic Concepts

### As you read, look for

- how people satisfy needs and wants by acquiring goods and services:
- the kinds of resources that help us satisfy needs and wants:
- the opportunity benefits, opportunity costs, and trade-offs involved in economic choices;
- how supply and demand determine the price for a good or service;
- differences among the three economic system models:
- terms: economy, goods, services, consumer, producer, natural resource, human resource, capital resource, scarcity, supply, demand, profit, economist, traditional economy, command economy, market economy.

The term **economy** refers to how people manage material resources in a community or other organized body. A single household can have an economy. Larger units of social organization—like cities, states, and nations—do too. Because the economies of modern nations routinely interact with those of other nations, we can also talk about the existence of a global economy. There are several basic concepts you must understand in order to comprehend how economies work at both the smallest (*micro*) levels and the largest (*macro*) levels of social organization.

Left: The port at New Orleans is the fourth-largest port in the United States based on volume of cargo handled.

Below: Carefully organized products may only stay in warehouses a couple of hours before being transferred to other destinations.



# Social Studies Standard 10—Interdependence and Decision Making

Students use economic knowledge and skills to make decisions as individuals, families, groups, or businesses in the interdependent and changing state, nation, and world.

**8.10.1** Analyze how scarcity of resources affects the choices of individuals and communities

**8.10.2** Explain choice/trade-offs, cost/benefits, and opportunity costs related to making personal economic decisions

### **Section 1**

# **Basic Economic Concepts**

### **INTRODUCE**

### **Outline**

- A. Needs and Wants
- **B.** Resources and Scarcity
- C. Costs and Benefits
- D. Trade-Offs
- E. Supply and Demand
- F. Basic Economic Questions and Economic Systems

### **Materials**

Textbook, pages 73-78
Student Workbook
Teacher Tech DVD
Lesson Plan
Guided Reading, 3-1
mystatehistory.com
Online Textbook

### **Bellringer**

Ask students: What comes to mind when you read the word *economy*? Compile a list on a screen or Smart Board based on student responses. Then, provide students with a formal definition as stated on this page.

# **Developing Writing Skills: Sentence Synthesis**

Instruct students to read about basic economic concepts. Next, have students write a sentence that includes all of the following words: *economy*, *goods*, and *services*. Then, ask students to share their sentences with the class.

### **Discussion**

Ask students: What are humans' basic needs? (air, food, water, clothing, and shelter) Next, on a piece of paper, instruct students to write down five of their wants. Have students share these with the class and discuss the difference between the two categories—needs and wants.

### **Using the Internet**

Share with your students this video (1:53) titled "Needs and Wants," as found at this website: http://teachmeaboutmoney.org/media/needs-and-wants/.

### **Higher Level Thinking**

Provide each student with a different page (or a photocopy of a single page) from an old copy of the Yellow Pages. Instruct students to find five examples of "goods" and five examples of "services" featured on the page.

### **Engagement**

Create a bulletin board with equally divided sections labeled "Natural Resources," "Human Resources," and "Capital Resources." Have students bring in one or more images illustrating one or more of these resources (cut out from a newspaper or magazine or printed off the Internet). Next, have students staple the image under the type of resource being illustrated.



### **Needs and Wants**

All humans have the same basic *needs*: air to breathe, food to eat, water to drink, and clothing and shelter to protect us from nature's extremes. Beyond these basic needs, the things we desire are called *wants*. People's wants—things they would like to have to make their lives more comfortable or enjoyable—are almost unlimited.

Humans satisfy their needs and wants by acquiring goods and services. Goods include tangible items (things you can touch) such as food, clothing, cars, and houses. Services are the work or activities people perform, often for a fee. Examples of a service include a musician's concert, a mechanic's oil change, or a waitress's meal service. The meal is a good, but the person who takes your order and brings your food is providing a service.

When you buy a meal in a restaurant, you are a **consumer**—a person who satisfies a need or want by buying a good or service. A **producer** is the person or group of people who use resources to make goods or provide services. The farmer who grows the food for the meal is an example of a producer.

### **Resources and Scarcity**

Resources are the building blocks of an economy. They help us to satisfy needs and wants. There are different kinds of resources. Natural resources come from Earth or nature and are useful to humans. They include water, trees and their fruits, or precious metals mined from Earth like copper, gold, and silver. The term human resources describes the persons who produce goods or services. A human can transform a natural resource into a good through effort and activity. Capital resources are the tools used in the production of goods and services. Examples of capital resources include machinery and factories.



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### Section 1: Basic Economic Concepts

Resources may be abundant in a given place or society, but all resources are limited. This makes them scarce. Scarcity is a basic economic concept. **Scarcity** exists when people and societies try to satisfy unlimited wants with limited resources.

Scarcity requires consumers and producers to make choices with their limited resources. The limits of people's or communities' resources force them to put limits on the amount of goods and services they obtain. Producers also have to make choices about the kinds of goods they produce or the level of services they provide based on available resources. An economic system is created by the choices producers and consumers make with the limited resources they have at their disposal.

### **Costs and Benefits**

Individuals, families, businesses, and governments all have to make economic choices. Each choice offers an opportunity that has a benefit and a cost. In the example about the exchange rates for deerskins, a Native American hunter with two dressed deerskins could choose a blanket or a tomahawk in exchange. If he chose the blanket, that is the opportunity benefit he received in the exchange. The item he did not choose, the tomahawk, is the opportunity cost. Opportunity cost is the value of your second choice, or the thing you decide not to acquire.

There are also costs and benefits in decisions about how you use other kinds of resources, including your time. The opportunity cost in any kind of decision is the value of the alternative you do not choose.

Say you have the opportunity to attend a New Orleans Saints football game one Sunday. Normally you go to your grandparents' house on Sunday for a big family lunch. If you choose to go to the football game, this is your opportunity benefit. Your opportunity cost is missing out on family time and great food.

**Below:** The bread this mother chooses is the *opportunity benefit*. The variety she does not choose is the *opportunity* cost.



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# **Engagement: Scarcity Activity**

For this scarcity activity, you will need small Styrofoam cups, plastic spoons, and m&m's candy (or an alternative). Follow this procedure with your students, so that they can experience the concept of *scarcity*:

- **1.** Announce to your students that a member of the community donated snacks that are to be shared with the class.
- 2. Instruct students to come forward, row by row, and serve themselves using a plastic spoon to empty m&m's candies into a Styrofoam cup.
- **3.** Within reason, allow students to serve themselves as much candy as they want.
- **4.** Continue calling rows of students forward until the bag of candy is empty.
- **5.** Feign surprise at the empty bag and explain that you thought there were sufficient m&m's "resources" for all the students. Apologize to those who did not receive a snack. Note: Some students may be disgruntled, but this is part of the experience.
- **6.** Debrief this experience by asking the following questions:
  - **a.** (Ask those students who did not receive the snack:) How did you feel when you realized there were no more snacks?
  - **b.** What was the problem?
  - **c.** Why was there a shortage?
  - d. How might this shortage be resolved? (Potential answers might include purchase more snacks; ration the snacks; have the teacher or principal distribute the snacks; the snacks could be sold to the highest bidder or distributed based on merit, such as good grades or good behavior.)
- **7.** Finally, reveal the hidden bag of m&m's candies and allow the remaining students to serve themselves a snack!

### **Using the Internet**

Share this video (3:11) excerpt from the movie *The Hudsucker Proxy* to visually introduce the concepts of "supply" and "demand," as found at this website: www.youtube.com/watch?v=Ng3XHPdexNM.

### **Discussion**

Have students relate to the class any occasions they can remember when they were involved in trade-offs. What was the situation and what were the costs and benefits that were being compared? Who suggested the specific trade-off? Was it successful?

### **Answer to Figure 3.1 Skill**

When demand goes up but the supply remains unchanged, the price goes up.

### **Discussion**

Have students identify products that they have heard of in the past year that have been in short supply. (Answers might include the latest smart phone, tablet, or video game; a popular children's toy; or a trendy item of clothing.) What often happens once these are no longer the "latest things"? (The demand for them goes down, and they might go on sale or be deeply discounted to encourage consumers to buy these items instead of a newer product.)

### **Trade-Offs**

Whenever an individual, a business, or a government makes a choice to have less of one thing to get more of something else, the results are called trade-offs. Evaluating trade-offs requires comparing the costs and benefits of each of the available alternatives with the other. Choosing between a blanket or a tomahawk is an either/or decision and the trade-off being made is clear.

Not all decisions are either/or decisions. By making small changes, a person can trade off a little more of one thing for a little less of the other. For example, if you think that family lunch is really important, you could arrive earlier, skip dessert, and leave in time to arrive at the football game shortly after kickoff. You would have made a trade-off that allowed you to have a smaller amount of both opportunities.

### **Below:** When the supply of gasoline is low, the price to fill your tank rises.



### **Supply and Demand**

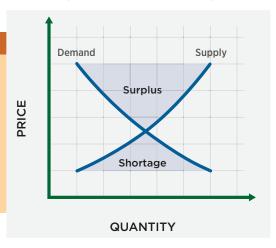
**Supply** is the quantity of a good or service available for sale. Supply can affect both purchasing decisions and prices. Consumers want to pay as little as they can for something. In general, when the supply of something is high, the price for it is low. Producers want to earn as much as they can for the goods or services they produce. If they keep the supply small, they can charge more for the scarce item. However, it might make sense for them to produce a lot of an item, sell more items at a lower price, and make more profit overall.

**Demand** describes the quantity of a good or service consumers are willing to buy. Demand is based on three things. A buyer must want something, have the ability to pay for it, and be willing to pay for it. If those conditions are in place, a consumer will still be conscious about price. In general, demand goes down for an item as its price rises. As the price of an item goes down, the demand for it tends to go up.

### Figure 3.1

### **Supply and Demand**

This economic model suggests that the price for a good will settle at a point where the quantity demanded by consumers (at a certain price) equals the quantity supplied by producers (at a certain price). What happens when demand goes up but the supply remains unchanged?



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### Section 1: Basic Economic Concepts

Supply and demand are separate concepts, but when considered together, they help us understand why goods have certain costs, and why people are or are not willing to pay those costs. The price of something is the result of an ongoing negotiation between producers and consumers based on supply and demand.

The prices of goods and services are important because they help shape economic decisions. If the supply of an item is low, but buyers want it badly enough, they will pay a higher price for it. If sellers want to sell large quantities of an item, they will often be willing to lower their price to an acceptable level. A producer will try to maximize **profit** (the amount left after costs are subtracted from the price), but will not make prices so high that buyers reduce their demand.

## **Basic Economic Questions and Economic Systems**

A person who studies the economy is called an **economist**. Economists seek to understand the way communities or societies address the issue of scarcity and decide how to allocate limited resources. Although economists have developed numerous theories about how economies work, in their simplest form, there are four basic questions that decision makers in an economy must answer. These are the questions:

- 1. What will be produced?
- 2. How will it be produced?
- 3. For whom will it be produced?
- 4. How much will be produced?

Those economic questions are answered by different people in different ways depending on the kind of economic system a society has in place. Economists have come up with a variety of models to explain the kinds of economic systems societies have developed. These models do not describe every economic system perfectly. All societies have an economy that blends more than one economic system model. Although the models are imperfect, they help us determine the broad characteristics that shape an economic system.



Left: The value of a nation's money rises and falls compared to the currency of other nations. Here the U.S. Dollar (USD) is shown to be about 78 percent as valuable as the European Union's currency, which is called the

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# Notes

### **Teacher Note**

There is an outstanding "supply and demand" lesson activity and graphing assignment for middle school students at this website: www.trin ity.edu/departments/economics/EIS 2009/MiddleSchoolLesson3.pdf.

You can find various other supply and demand worksheets and other teaching tools on the Internet. Search "Supply and Demand for Kids" and download materials that will be useful for reinforcing this lesson.

# Using Reading Skills: Organizing Information

Instruct students to read about each economic system, and then, have them take out a sheet of paper and create a table. At the top, students should create a separate column for each of the four basic questions that economists seek to answer. Next, down the left side of their paper, have students create four rows (taking up most of their full sheet of paper). Students should label each row with a different economic system. Finally, direct students to fill in the table with answers to these questions.

### **Answer to Figure 3.2 Skill**

Answers will vary.

### **ASSESS**

# Answers to "Reviewing the Section"

- **1.** The term **economy** refers to how people manage material resources in a community or other organized body. Single households, cities, states, and nations have economies, and there is even a global economy. **Services** are the work or activities people perform, often for a fee. A **producer** is the person or group of people who use resources to make goods or provide services.
- 2. Natural resources come from Earth or nature and include water, trees and their fruits, or precious metals. Human resources are the persons who produce goods or services. Capital resources are the things and places used in the production of goods and services, like tools, machinery, and factories.
- 3. In a traditional economy, people depend on agriculture, use barter for exchange, and make economic decisions based on customs, beliefs, or habits. In a command economy, the government directs the economic system and tries to control how producers answer the four basic economic questions. In a market economy, economic decisions are made at an individual, rather than a government, level. The four basic economic questions are answered by producers based on their beliefs about how consumers will respond. Supply and demand influence what is produced and how it is produced.

The three economic system models we will consider are a traditional economy, a command economy, and a market economy.

### **Traditional Economy**

Three aspects help to define a **traditional economy**. First, it tends to be heavily dependent on agriculture. Second, people tend to *barter* (use items of value rather than money or precious metals for exchange). Third, economic decisions are often made on the basis of long-held customs (traditions), beliefs, or habits. Because of this, change comes slowly and a person is likely to do the same kind of work that his or her ancestors did.

Before the French settled Louisiana, the Native American groups had a traditional economy. They hunted and engaged in agriculture. They also traded items of value with other groups. Customs, beliefs, and repeated patterns of behavior helped guide decisions about what had value and what was fair in the course of an economic exchange.

# Figure 3.2 Continuum of Economic Systems







A continuum is the range that exists between two different possibilities. This Continuum of Economic Systems is useful for comparing the economic freedom of various countries. Where would you expect the United States to be located on the continuum? What factors would you consider in making this placement?

### **Command Economy**

In a **command economy**, the government directs the economic system and tries to control how producers answer the four basic economic questions. The government makes rules and regulations that control what is produced and how and where it is produced. Government-mandated controls also affect people's access to economic goods.

At the time Louisiana was established, a king ruled France. This kind of government is called a *monarchy*. Beginning in 1700, the French king and his advisers made detailed plans for how they wanted Louisiana's economy to develop so that it would enrich France. Their schemes were not successful, but their plans provide an example of how a command economy functions.

### **Market Economy**

In a market economy, economic decisions are made at an individual, rather than a government, level. The four basic economic questions are answered by producers based on their beliefs about how consumers will respond to what they produce. In turn, supply and demand influence what is produced and how it is produced. Producers hope they make the right decisions about consumer demand. A lack of demand for a product can doom a business.

### **Reviewing the Section**

- 1. Define in sentence form: economy, services, producer.
- 2. Describe the three kinds of resources that help consumers satisfy their needs and wants.
- 3. Define the three economic system models.

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### Discussion

Ask students to provide one example of a government rule or regulation that impacts the economy. What is the rationale or justification for this rule or regulation?

### **Engagement**

Invite your students to participate in the Bead Game to experience a traditional, command, and market economy. The game can be found at this website: http://files.eric.ed.gov/fulltext/ED458175.pdf.

### Section 2

# Louisiana's Economic History

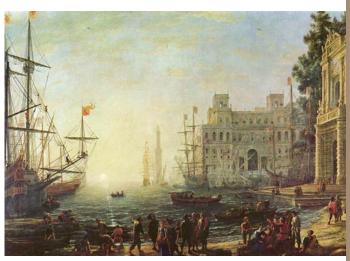
### As you read, look for

- the transition from the Native American traditional economy to the European command economy;
- why the failure of mercantilism led to smuggling;
- the rise of the market economy after Louisiana was acquired by the United States;
- how the discovery of oil boosted an economy devastated by the Civil War;
- present-day attempts to diversify the state's economy;
- terms: commerce, mercantilism, smuggling.

Before the arrival of the French, Native Americans who lived in the area that became Louisiana had traditional economies. They fed themselves by hunting and farming. When they needed goods they could not provide on their own, they traded with other groups that had access to different resources.

When the Europeans arrived, they introduced an economy based on commerce (buying and selling goods). They bartered with nearby tribes, but they also brought commerce and the use of money with them. The French

king established a command economy in Louisiana. He hoped to create wealth through a plan called **mercantilism** (the idea that colonies existed to contribute to the wealth and power of the mother nation).



**Above:** This painting by Claude Lorrain shows a busy European seaport in the era of mercantilism

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# Social Studies Standard 10—Interdependence and Decision Making

Students use economic knowledge and skills to make decisions as individuals, families, groups, or businesses in the interdependent and changing state, nation, and world.

**8.10.1** Analyze how scarcity of resources affects the choices of individuals and communities

**8.10.2** Explain choice/trade-offs, cost/benefits, and opportunity costs related to making personal economic decisions

**8.10.3** Describe historical factors influencing the economic growth, interdependence, and development of Louisiana

### **Section 2**

# Louisiana's **Economic History**

### **INTRODUCE**

### **Outline**

- A. The Failure of Mercantilism
- **B.** Louisiana's Market Economy
- C. Oil and Manufacturing

### **Materials**

Textbook, pages 79-82
Student Workbook
Teacher Tech DVD
Lesson Plan
Guided Reading, 3-2
mystatehistory.com
Online Textbook

### **Bellringer**

As students enter the classroom, have this list posted on the screen or Smart Board:

- 200 pounds of gunpowder
- 200 pounds of bullets
- 200 pounds of game-shot
- 12 guns
- 100 axes
- 150 knives
- Several kettles, glass beads, and gun flints

Advise students that these items were a gift from the French government to Native Americans. What did the French want from the Native Americans? (an alliance as exclusive trade partners) How might the Native Americans use these gifts? (hunting, self-defense, and attacks on enemy tribes and enemy settlers) What do these gifts tell you about the Native American economy? (The gifts were goods not being produced by the traditional economy of the Native Americans.)

# Using Reading Skills: Interpreting Quotations

As students enter the classroom, have the quotation below posted on a screen or Smart Board:

[S]kins of buffalo, deer, and bear—those are the slaves I want.... To get them will not cost you your lives. (1702)

Advise students that this quotation is from Pierre Le Moyne, Sieur d'Iberville, the French governor. Next, ask students the following questions: What does the speaker want? (animal skins) Whom is this person addressing? (Native Americans, specifically a Chickasaw and Choctaw delegation) What type of "hunting" can be deadly? (slave hunting) Which European power was encouraging the Native Americans to capture slaves? (the English) According to the Iberville quotation, how is aligning with the French better than trading with the English? (The French do not ask for trade items that will lead to an increase in violence and risking lives. Instead, they desire items that are in abundance in the wilderness.)

### **Teacher Note**

A mercantilism classroom simulation can be found at this website: https://sites.google.com/a/caldwellschools.com/cechs-big-ideas/home/9th-grade/explorer/world-history-world-geography/mercantilism-simulation.



### The Failure of Mercantilism

Mercantilist nations established colonies so they could use the colonies' resources for their own benefit. The French government wanted colonists to provide raw materials like timber, tobacco, or deerskins for shipment back to France. Colonists were also required by law to buy or sell goods only with the French.

Both the French and later the Spanish had high hopes for Louisiana's economy. They hoped to find gold or silver. This did not happen. Their other economic schemes also failed to generate wealth in their home countries.

Mercantilism was also a failure for the early colonists. By law, they were required to trade only with the power in charge, but neither France nor Spain could ever provide enough trade goods to meet the colonists' needs and wants. In response, the colonists made economic decisions designed to meet their own needs. They developed a frontier exchange economy. People made their own goods, grew their own crops, and traded with their nearby neighbors. This is part of how the trade in deerskins developed.

Colonists also traded with people from nations besides France and Spain. They did so as a matter of necessity, but the colonial powers considered this to be **smuggling** (secret and illegal trade). It was proof that France and Spain were not successful in establishing mercantilist command economies in Louisiana.

### Louisiana's Market Economy

By the time the United States acquired Louisiana in 1803, a different kind of economy had begun to take shape. As the production of sugar and cotton became more profitable, Louisiana developed a market economy based on the export of these two important cash crops.



Above: This French ship is under

attack by Barbary pirates. Pirates

were a constant threat in the age



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### Section 2: Louisiana's Economic History

People from other states used the Mississippi River to transport their own crops to places where they could be sold for a profit. The port at New Orleans became one of the nation's largest and busiest. Before 1860, only New York City's port could complete with it.

The port at New Orleans played an important role in the nation's economic system until 1860. The Civil War and its aftermath devastated Louisiana's economy. It would remain *stagnant* (not advancing or developing) for decades. Much of the economic change that occurred in those years came from or benefited people from outside the state. Farmers came from as far away as Iowa to establish rice farms in this productive area. In the early 1900s, companies from other states cut much of the timber from Louisiana's forests. They tended to ship it elsewhere for processing, and the profits also flowed out of state.

### Oil and Manufacturing

The discovery of oil in Louisiana in 1901 created new job opportunities and brought new kinds of businesses to our state. Large corporations like Standard Oil came to Louisiana. That company built a major refinery in Baton Rouge that began to process oil in 1909. With this development, many people in the state gained new jobs and a new way of life beyond the field and farm.

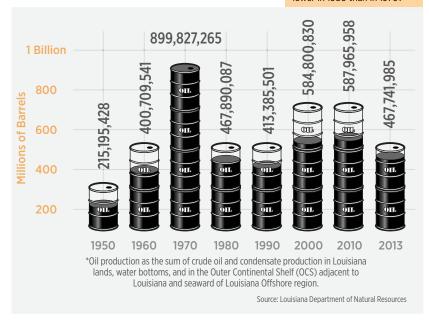
# Lagniappe

In 1909, a boll weevil infestation had devastated the local cotton crops, so the Baton Rouge area welcomed the new oil refining industry. The Standard Oil refinery began processing oil just seven months after construction began.

### Figure 3.3

Louisiana Oil Production (in Barrels)

Louisiana oil production rises and falls from year to year. Why do you think oil production was so much lower in 1980 than in 1970?



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# **Answer to Figure 3.3 Skill**

The oil surplus in the 1970s caused the price to go down, so it wasn't as profitable to drill for oil in the 1980s.

### **Did You Know?**

- Oil was first discovered in Louisiana near Jennings at a depth of 1,700 feet.
- By 1879, Standard Oil
   Company controlled 90
   percent of the oil-refining
   capacity in the United States.

### **Higher Level Thinking**

As students enter the classroom, have this quotation by Thomas Jefferson posted on a screen or Smart Board: "There is on the globe one single spot, the possessor of which is our natural and habitual enemy." Ask students: To what "spot" on the globe is Jefferson referring? (Hint: It is in present-day Louisiana.) After students share their responses, reveal the second sentence: "It is New Orleans, through which the produce of three-eighths of our territory must pass to market."

### **Discussion**

Project the painting, Base of Canal Street, Steamboat America, by William Henry Jackson (1900), as found at this website: www.crt.state.la.us/louisiana-state-museum/online-exhibits/coffee-trade-and-port-of-new-orleans/index. Ask students: What types of economic activities are taking place in this painting of the port of New Orleans?

### **Discussion**

Project this photograph (Levee Scene: image one) of the Port of New Orleans (c. 1900), as found at this website: www.crt.state.la.us/louisiana-state-museum/online-exhibits/coffee-trade-and-port-of-neworleans/index. (Scroll down to find the photo.) Ask students: What means of transportation are in use in this photograph? (cargo ship, railroad, and horse and wagon) What products are being exported? (cotton and timber)

### Chapter 3: Louisiana's Econom

### **Teacher Note**

Students will read more about Andrew Higgins in the introduction to Chapter 14.

### **Teacher Note**

A brief history of the Standard Oil Refinery in Baton Rouge (including a timeline of technological developments) can be found at this website: www.exxonmobil.com/NA-English/PA/about\_where\_ref\_br\_history.aspx.

### **Did You Know?**

In 1937, the first Louisiana offshore well was drilled along the coast of Cameron Parish.

### **ASSESS**

# Answers to "Reviewing the Section"

- **1. Commerce** is buying and selling goods. **Mercantilism** is the idea that colonies existed to contribute to the wealth and power of the mother nation. **Smuggling** is secret and illegal trade.
- 2. Farmers who came from as far away as lowa to establish rice farms and outof-state investors who cut much of the state's timber and shipped it elsewhere for processing caused profits to flow out of state.
- **3.** Andrew Higgins developed a boat designed for use in the state's shallow lakes and bayous. It gained wider use during World War II, when it became important to the U.S. war effort. His manufacturing facility grew rapidly and prospered as a result.

**Right:** The Higgins Boat was a landing craft used to transport troops from ships to the shoreline.



Manufacturing came slowly to Louisiana. Much of the industry that developed initially focused on local needs. For example, Andrew Higgins developed a boat designed for use in the state's shallow lakes and bayous. During World War II, the Higgins Boat became important to the U.S. war effort. His manufacturing facility grew rapidly and prospered as a result. Higgins Industries is one of the most successful examples of mass production in the state's history.

Since the 1950s, Louisiana's economy has been dependent on the oil industry and *petrochemical companies* (companies that use oil products to create a variety of chemicals and products). Today, Louisiana's goal is to diversify its economy and attract new kinds of businesses, thus finding multiple ways to profit. This is important because the price of oil can rise and fall dramatically.

While oil is generally very profitable for the state, when the worldwide supply rises, prices drop. The international Organization of Petroleum Exporting Countries (OPEC) can make decisions about the oil supply that affect both demand and price. Natural disasters, like hurricanes in the Gulf of Mexico, can also shut down oil rigs and affect the price of oil.

These man-made and natural occurrences affect global oil markets. They also affect Louisiana's economy because so many people work in the oil industry, and because the state relies on the taxes this industry pays. When oil prices go down, the amount of tax dollars collected by the state falls significantly.

### **Reviewing the Section**

- 1. Define in sentence form: commerce, mercantilism, smuggling.
- Why did economic changes after the Civil War benefit people from other states more than Louisiana citizens?
- 3. What did Andrew Higgins design, and when did his design gain wider use?

Notes					
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### Section 3

# Louisiana's Resources

### As you read, look for

- the different kinds of biological and mineral resources found in Louisiana:
- types of capital resources used to produce Louisiana's goods and services;
- the connection between education and human resources in the modern technological world;
- terms: biological resource, reforestation, habitat, mineral resource.

Resources are the building blocks of an economy. An economic system uses natural, human, and capital resources to produce goods and services. Louisiana's natural resources have played an important part in the state's economic development. However, businesses also need human and capital resources in order to grow and prosper.

### **Natural Resources**

Natural resources like air, water, and soil are products of Earth and its atmosphere. These natural resources have provided the foundation for the development of Louisiana's economy.

Louisiana's rich soil has long supported agriculture. Small farms and large plantations dominated agriculture in the state until about 1900, when they gave way to *agribusiness* (farming thought of as a large business) companies. Although fewer individuals farm for a living, production still remains high.

In 2012, soybeans and corn were the state's two largest food crops. Their harvests were valued at \$700 million and \$600 million respectively. Sugarcane and rice were the third and fourth most valuable crops. Sugar brought more than \$586 million to the state. The value of rice followed at \$371 million. Cotton produced a value of over \$231 million.



# <u>Lagniappe</u>

Soybeans are used for livestock feed and are found in things we eat—like soy milk, soy sauce, and tofu. Soybean oil is an ingredient in foods like mayonnaise, tuna packed in oil, baked goods, and margarine. Soy biodiesel is cleaner burning than petroleum-based diesel oil; and soy crayons, ink, and candles are preferred because they are nontoxic.



**Left to right:** A typical cotton field just before harvesting; shrimp after being caught; sugarcane fields; cane sugar after refinement.

### Social Studies Standard 7—Global Awareness

Students interpret the role of Louisiana in a global society.

**8.7.2** Evaluate the role and importance of Louisiana ports and products in the international economy

### Social Studies Standard 9—Resources

Students analyze Louisiana's natural, human, and capital resources and their connection to the past and present economy.

**8.9.1** Analyze the role of specialization in Louisiana's economy

### **Section 3**

## Louisiana's Resources

### **INTRODUCE**

### **Outline**

- A. Natural Resources
- **B.** Capital Resources
- **C.** Human Resources

### **Materials**

Textbook, pages 83-92
Student Workbook
Teacher Tech DVD
Lesson Plan
Guided Reading, 3-3
mystatehistory.com
Online Textbook

### **Bellringer**

Review with your students the definition of natural resources. Next, hand out dry-erase markers to ten students. Instruct them to walk to any part of the board and respond to this prompt: Name one of Louisiana's natural resources. (Teacher Note: The large number of students at the board gives individual students a level of anonymity.) As soon as one student finishes, call up an additional student to respond until all students have attempted an answer to this prompt. Then, discuss student answers and categorize them according to whether the resources listed are extracted from the water, soil, or underground.

# **Building 21st-Century Skills: Bar Graph**

Ask students to create a bar graph for Louisiana's top four food crops (based on their money value) as described on this page.

### Chapter 3: Louisiana's Econom

### **Did You Know?**

According to the United States Department of Agriculture, there were 29,000 farms in Louisiana, and the average farm size is 274 acres.

### **Higher Level Thinking**

Ask students to use the data about the number of farms and average size to calculate the total farm acreage in Louisiana.  $(29,000 \times 274 = 7,946,000 \text{ acres})$ 

### **Answer to Map 3.1 Skill**

Most of the rice is grown in the southwestern part of the state.

### **More Map Skills**

Have students study the map and try to discover other trends concerning crops or other natural resources. There are obvious reasons for some of the trends. Citrus fruit is grown in the extreme southern part of the state because of the warmer (mostly frost-free) climate. Students have learned that sugarcane is grown in South Louisiana because it requires a long growing season. But some trends are not so obvious. Why is dairy farming concentrated in the Florida Parishes? Why is cotton concentrated in northeast Louisiana? Why are more forest products harvested in the northern half of the state? Students can conduct research to learn more about the distribution of Louisiana's natural resources.

### **MAP 3.1**

Louisiana's Natural Resources

**Map Skill:** In what section of the state is most of the rice grown?

Animals and animal products used for food are also an important part of the state's agricultural economy. Louisiana's soil, climate, and abundant water resources support cattle and dairy farming. Cattle ranching generated \$498 million in 2012. Dairy farming is a smaller concern, generating \$48 million in that same year. Poultry and eggs were the most valuable agricultural food commodity, generating \$958 million. Egg and poultry production tend to be done in agribusiness settings, where chickens are raised in large numbers and processed in nearby plants.



Notes			

### **Biological Resources**

Plants and animals are **biological resources**. Biological resources are renewable; they can replenish themselves over time. Because biological resources are often farmed or hunted intensively, humans sometimes have to play a role in the renewal process.

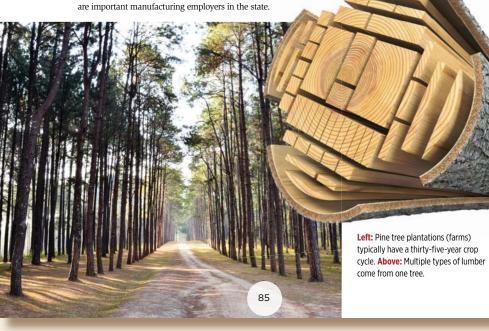
### **Forests**

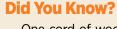
A forest is an area rich in plants and animals where trees are the predominant plant. Trees are one of the state's top cash crops. Timber is harvested in fifty-nine of the state's sixy-four parishes. As of 2010, forests covered more than 13 million acres—nearly 48 percent of the state's land area. That same year, the owners of those forested lands sold timber worth more than \$824 million. Once processed, products generated from that raw timber had an economic impact in excess of \$3 billion. Forestry, or the harvesting of trees, also provided more than 26,000 jobs.

Although the cypress is the state's official tree, the pine is the major tree species harvested in Louisiana. More than 75 percent of the pine cut is referred to as pulpwood because it is shredded into a pulp that is used to make products like paper and cardboard boxes.

Trees cut for their lumber are called sawtimber. Most of the sawtimber is pine, but some also comes from hardwood trees like oak. Hardwood sawtimber is used in construction and is processed into furniture, flooring, and kitchen cabinets.

Industries related to forestry include paper mills, lumber mills, and plants for making plywood (a strong board made by gluing thin sheets of wood together under heat and pressure). These kinds of businesses





Lagniappe

The scientific name for plants is

flora, and the name for animals

is fauna.

One cord of wood (4 feet x 4 feet x 8 feet or 128 cubic feet of wood) will produce 7.5 million toothpicks, 1 ton of paper, or 61,370 business envelopes.

### **Did You Know?**

Softwoods like pine are usually cut into lumber of "one-by" or "two-by" dimensions. You would expect that a "two-by-four" (advertised as a 2" x 4" board) would actually measure 2 inches by 4 inches. But its actual measurement is more like 1-1/2 inches by 3-1/2 inches, depending on drying of the material and milling methods. The actual measurement of a "two-by-six" is more like 1-1/2 inches by 5-1/2 inches.

### **Using the Internet**

The website http://cpbis.gatech.edu/data/mills-online-new?state=Louisiana has a list of pulp mills, pulp and paper mills, and paper mills in Louisiana. Is one of these mills near your home? If so, have students do some research to find out more about it.

Notes			

### **Have You Visited?**

Have you visited the Louisiana State Arboretum near Ville Platte? (An arboretum is a place where trees and plants are grown for scientific and educational purposes.)

It was Caroline Dormon who proposed the creation of the Louisiana State Arboretum, which was established in 1961. It was the first such area in the South and the first state-supported arboretum in the United States. The Caroline Dormon Lodge serves as a visitor center and library of the arboretum.

Because its 300 acres have a great variation in topography, almost every type of Louisiana vegetation except coastal marsh and prairie are represented on its grounds. Though picnicking and pets are not allowed, visitors will enjoy walking the miles of nature trails in the arboretum and can enjoy the picnic grounds and camping facilities of nearby Chicot State Park.

### **Answer to Map 3.2 Skill**

White paper is produced near the Mississippi River.

### **More Map Skills**

Ask students if they are familiar with all of the forest products identified on the key to Map 3.2. Have them research the unfamiliar products and find out their uses.

Some of the earliest companies that cut Louisiana's trees engaged in a practice called clear-cutting, where all the trees were taken and the land was left bare. In 1921, a woman named Caroline Dormon was named the state's instructor of forestry. She and others led the way toward making reforestation (replanting trees in areas that have been cut) a standard part of the tree-harvesting process. By the early 1960s, Louisiana forests were growing at twice the rate they were being harvested. In 1998, for example, more than 100 million tree seedlings were planted around the

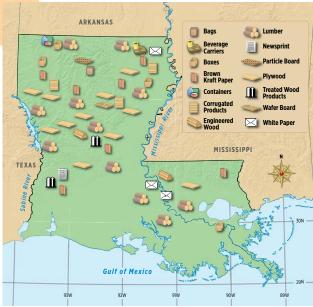
state to replace trees that had been harvested for profit. In this case,

humans aided the biological resource renewal process.

### MAP 3.2

Louisiana's Forest Industries

**Map Skill:** Near which body of water is white paper produced?



### Wildlife

Wildlife is the term used to describe the animals that live in the state's diverse natural environments. At the beginning of the twentieth century, timber cutting and clearing land for farming reduced the state's wildlife habitats (places where plants or animals normally or naturally grow). As habitats shrank, so did wildlife numbers. In recent decades, more careful management of the state's habitats and wildlife has led to population growth in many species. The white-tailed deer was once endangered. In response, the state decreased the number of hunting permits issued until its numbers recovered. Today, with the deer population estimated at 1,000,000, and with hunters licensed to harvest about 200,000 of them, the deer population can renew itself.

Notes			

### Section 3: Louisiana's Resources

Alligators may be the wildlife species most associated with Louisiana, but they too were overhunted and became endangered. In 1962, Louisiana outlawed alligator hunting. For the next ten years, the species was left alone to recover. In 1972, hunting resumed under strict controls. Only limited numbers of alligators can be hunted each year, and most wild alligators are harvested during September, when females are most likely guarding their eggs. This means mostly male alligators are harvested, protecting the future of the species. Alligators can also be hatched from eggs and raised in captivity on alligator farms.

Due to strict controls, the alligator population has recovered and currently thrives in the wild. There is a demand for their meat, and a higher demand for their skins for use in luxury goods like shoes, watchbands, and purses. The sales of all alligator meat and skins harvested in Louisiana yields more than \$40 million each year.

### Fish and Fisheries

Louisiana's many kinds of water habitat support a diverse population of fish. A mixture of brackish and saltwater environments dominates in the state's coastal areas. The interior features freshwater lakes, bayous, and man-made canals. All these bodies of water are home to a variety of fish and other *aquatic* (existing on or near water) species.

More than 700,000 Louisianians enjoy recreational fishing. In freshwater areas, they catch bream, catfish, crappie, and several types of bass. Many people also use nets or traps to catch crawfish and use grabs (also called gigs) to catch frogs.

In coastal areas, fishermen catch flounder, mackerel, redfish, and speckled trout. Further offshore, common catches include bluefish, cobia, grouper, jackfish, snapper, and tuna.



# 

### **Did You Know?**

lagniappe

population is estimated to be

approaching 2,000,000. There

are also over 300,000 gators

on Louisiana alligator farms.

- Louisiana has the largest alligator population in the United States.
- A Louisiana alligator-hunting license costs \$25.

### **Using the Internet**

Share with your students this video on offshore fishing in Louisiana, as found at this website: www.fishing. louisianatravel.com/iframe-colorbox/574?width=847&height=487&iframe=true.

### **Using Art**

Have students make a booklet with a different fish caught in Louisiana on each page. (You can limit the page count to a reasonable number.) In addition to a picture of the fish, each page should contain a description of its size, where it is caught (saltwater or freshwater), whether it is caught for food or for sport, and any other interesting facts they learn about the fish.

### **Using the Internet**

An interesting video (5:37) on the successful combination of rice growing and crawfish "farming" can be seen at www.youtube.com/watch?v=s6k5qUCPFck.

### **Teacher Note**

An informative slide show on Louisiana's commercial fishing can be found at this website: www.lacpra.org/assets/docs/JohnLouisianaCommercialRecreationalCoastalFisheriesjuly30.ppt.

### **Did You Know?**

There are 15,000 commercial fishers in Louisiana.

### **Discussion**

Ask students: What efforts are you, your school, and your community making to recycle resources?

### **Did You Know?**

Petroleum consists basically of compounds of only two elements, carbon and hydrogen! These elements combine in a large variety of ways, so crude oils vary greatly in the chemical composition and physical properties (such as color).

### Discussion

Ask students: What products do you use on a daily basis that are made from petroleum? Then, share the list of petroleum products at this website: www.ranken-energy.com/Products%20 from%20Petroleum.htm.



Many offshore fishermen like to anchor near oil rigs, where underwater reefs form on the rigs and attract fish.

### Lagniappe

Oil is measured in barrels, and a barrel of oil contains 42 gallons. When oil was first discovered in Pennsylvania in 1859, it was shipped by wagon to railheads and docks. The most practical container was a 42-gallon watertight barrel that had been used for shipping things like fish, molasses, and soap. When filled with crude oil, the barrel weighed 300 pounds, which was as much as a man could handle. So the 42-gallon barrel became the standard measure for crude oil

**Below:** Oil is used to lubricate mechanical gears. **Bottom:** Oil platforms like this one are a common sight in the Gulf waters off Louisiana's coast. Commercial fishing is one of the state's most important economic activities and accounts for about 25 percent of the entire commercial catch in the United States each year. Louisiana seafood—including crabs, oysters, and shrimp—are enjoyed here, but are also shipped all over the country. Each year, between 10 and 15 million pounds of oysters are harvested from Louisiana's waters. The annual harvest of white and brown shrimp is even higher. It averages more than 100 million pounds. Annual crab harvests vary widely, but the average harvest is about 48 million pounds.

### **Mineral Resources**

Mineral resources are natural substances found inside Earth. They are formed by slow geological processes. Minerals can be solid, like gold or silver, or fossilized substances, like oil. They become a resource when they exist in enough quantity that they can be extracted from Earth for economic gain. Unlike biological resources, mineral resources are non-renewable. Once extracted from Earth, they are not replaced by nature.

In Louisiana, the most important mineral resource is oil. Other important mineral resources include natural gas, sulphur, and salt.

### Oil

Plants that decayed millions of years ago created the oil we use today. Louisiana contains at least 10 percent of the known oil reserves in the United States. There are also large quantities of oil beneath the waters of the Gulf of Mexico. Land and aquatic sources of oil have made Louisiana one of the top oil-producing and refining states in the nation.

Louisiana's first oil in commercial quantities came in at a well near Jennings in 1901. This is considered the start of the oil industry in our state. Soon thereafter, more oil fields came in and were developed in Caddo and Claiborne Parishes. The first overwater drilling in the United States took place on Caddo Lake in 1910.

The first offshore oil well began production in 1937. This is considered the start of Louisiana's offshore oil and gas industry. Since that time, thousands of wells have been drilled in the Gulf of Mexico. The explosion of the Deepwater Horizon rig in 2010 and the oil spill that followed reminded Americans that deepwater drilling can be risky even though it is considered necessary to meet current energy needs.

Despite its risks, our current economic system is dependent on oil and other petroleum products. The most common product refined from oil is gasoline. Hundreds of other products are manufactured from the chemicals created when oil is refined.



Notes			



### **Did You Know?**

According to the Occupational Safety and Health Administration (OSHA), the peak of the Deepwater Horizon response operations saw more than 47,000 men and women involved in responding to and cleaning up the oil spill.

### **Diverse Learners**

Divide your students into heterogeneous groups of four students. Assign each group a major topic relating to the Deepwater Horizon oil spill. Have students research offshore oil drilling, past oil spills, the cause of the BP oil spill, the eventual capping of the oil well, the environmental impact, and the economic impact on the Gulf Coast and Louisiana.

### **Discussion**

Ask students: In light of the Deepwater Horizon oil spill, should oil companies be allowed to drill off the coast of Louisiana?

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### **Using the Internet**

Share with your students the maps of Louisiana crude oil and natural gas occurrence, as found at this website, on pages 26 and 27: www.blm.gov/pgdata/etc/medialib/blm/es/jackson\_field\_office/planning/plannng\_pdf\_ar\_rfds.Par.96360.File.dat/LA\_RFDS\_R2.pdf.

### **Engagement**

Ask students if their families make use of natural gas in their homes. For what purposes? Do any of their parents work in a building or work with equipment that uses natural gas? If your city has a public bus system, do the buses use natural gas? Be sure students are aware of the large supply and the widespread use of natural gas in Louisiana.

### **Using the Internet**

The website www.energyfrom shale.org/hydraulic-fracturing/how-hydraulic-fracturing-works has an informative (definitely pro-industry) video (3:32) on the process of hydraulic fracturing.

### Natural Gas



Conventional

non-associated gas

Shale gas

Louisiana's natural gas deposits are even larger than its oil deposits. More than a quarter of the nation's supply of natural gas comes from Louisiana. In 1908, the state's first natural gas pipeline began transporting oil from the Caddo field to nearby Shreveport.

Today, natural gas is used to heat the majority of homes and businesses in the state. It is considered a cleaner fuel than gasoline and is sometimes used to power vehicles like public buses. The hope is that using natural gas in this way can help reduce air pollution.

# **Spotlight**Haynesville Shale



New horizontal drilling techniques and a method of obtaining gas called hydraulic fracturing, which were developed in the late 1990s, made drilling in the Haynesville Shale economically practical. In the horizontal drilling technique, pipe is drilled straight down 10,000 feet or more to a layer of rock that contains natural gas. Then the pipe actually turns a

corner and runs horizontally through the gas-rich layer of rock. Explosives punch holes in different sections of the horizontal pipe so that gas can be extracted from multiple places using only one well pad on the surface.

Then begins the hydraulic fracturing, often called "fracking." Sand, water, and chemicals are pumped into the horizontal pipe under high pressure. The mixture surges through the holes in the pipe and fractures (breaks up) the rock around it, releasing the trapped gas. The sand mixture is then removed, and the natural gas is sucked into the pipe and rises to the surface.

In the boom years between 2007 and 2012, a total of 2,250 wells were completed in the Haynesville Shale. Louisiana's most active areas have been Caddo, Bienville, Bossier, DeSoto, Red River, and Webster Parishes. As the supply of natural gas increased, the price of natural gas began to fall, and the steadily rising drilling activity fell as well. The gas boom became, if not bust, then at least a severe slow-down. There have also

a bust, then at least a severe slow-down. There have also been environmental concerns about the chemicals used in fracking.

The future of Haynesville Shale is uncertain. The expensive drilling process will once again be economical if the price of natural gas rises. Two other potential areas of growth are proposed petrochemical plants in South Louisiana and the conversion of gas into liquefied natural gas (LNG) for export. Haynesville Shale will no doubt continue to make news for years to come.

Notes			



Native Americans were the first to use the state's salt deposits as a mineral resource. They located salt that had made its way to Earth's surface and used it as a trade good with other tribes.

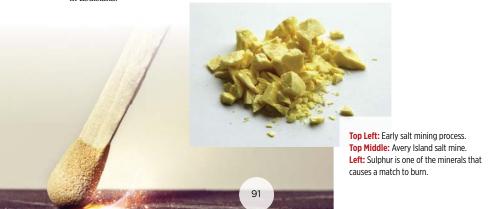
During the Civil War, a massive underground salt deposit was discovered on Avery Island. Midway through the war, federal troops invaded the island and destroyed the salt works. After 1865, mining returned, and today the salt dome at Avery Island still produces salt in large industrial quantities.

Most people think of salt as a flavoring for food, but it can be refined into other chemicals that form the basis for hundreds of products. Polyvinyl chloride (PVC) is a common plastic made in a process that begins with salt. The plumbing in your home very likely contains some PVC pipe.

### Sulphur

The first major discovery of Louisiana sulphur took place in 1869. The town of Sulphur in Calcasieu Parish is named for this discovery and the industry that grew up around it. This is also how Port Sulphur in Plaquemines Parish got its name. Sulphur is used to make matches, gunpowder, medicine, and plastics.

In recent years, the price of sulphur has dropped because the international supply of the mineral is very high. There is so much cheap sulphur available worldwide that it has become unprofitable to mine it in Louisiana.



# **Notes**

### **Did You Know?**

According to the Salt Institute, salt is the most common and readily available nonmetallic mineral in the world. There are enough salt reserves in the United States to supply the world's needs for the next 100,000 years.

### **Reviewing Geography**

Ask students what they remember about the salt domes that they studied in Chapter 1 (page 16). Then refer to http://lagic.lsu.edu/Satellite Tour/AveryWeeks/description\_files/ v3\_slide0007.htm for a description and satellite image of Avery Island and Weeks Island—two of the Five Islands in the Marsh region. A satellite view of these two "islands" clearly shows their dome shape and their elevation above the surrounding marsh.

### **Did You Know?**

Another use for salt is for melting ice on roads in the winter. Road salt, or rock salt, works by lowering the freezing point of water, often by enough to melt existing ice. A solution with 20 percent salt melts at 2°F, where pure water melts at 32°F.

### **Using the Internet**

Share with your students this video (3:52) on the restoration of the Domino Refinery in Chalmette, as found at this website: www.nola.com/business/index.ssf/2012/12/domino\_sugars\_chalmette\_refine.html.

### **Answer to Figure 3.4 Skill**

Answers will vary.

### **ASSESS**

# Answers to "Reviewing the Section"

- 1. Biological resources include plants and animals (flora and fauna). These resources are renewable over time. Reforestation is replanting trees in areas that have been cut. A habitat is the place where a plant or animal normally or naturally grows.
- 2. It accounts for about 25 percent of the entire commercial catch in the United States each year. Louisiana seafood—including crabs, oysters, and shrimp—are enjoyed here and are shipped all over the country. Each year between 10 and 15 million pounds of oysters are harvested from Louisiana's waters.
- **3.** They need education and specialized training.

### Figure 3.4

### **Economic Factors of Production**

An entrepreneur is a person who organizes, manages, and assumes the risks of a business or enterprise. Do you know any entrepreneurs? If so, what is the nature of their business?



# Lagniappe

The Domino Refinery in Chalmette, built in 1909, is the largest sugar refinery in the Western Hemisphere and the oldest in existence. Hurricane Katrina in 2005 flooded the building with nine feet of water, turning eight million pounds of raw sugar into a gooey mess! But the refinery was repaired, and it reopened ahead of schedule ninety-eight days later.

### **Capital Resources**

In general, it takes some kind of capital resource to transform a natural resource into a product. In Louisiana, capital resources include lumber mills, sugar refineries, oil refineries, cotton gins, and rice mills. The machines and equipment used inside these processing facilities are also capital resources.

### **Human Resources**

Human beings are an economic resource when they supply the labor—whether physical or mental—that transforms a resource into a good or service. In an economic system, laborers are paid for the work they perform.

Today's diverse and interconnected state, national, and global economies require new skills and specialization. People who want good jobs need to have education and specialized training to make them attractive to employers. Each of you is being educated in part to give you the opportunity to become a human resource in the economic system where you choose to live and work.

### **Reviewing the Section**

- 1. Define in sentence form: biological resources, reforestation, habitat.
- 2. Why is commercial fishing such an important factor in Louisiana's economy?
- 3. What do people need in the modern world to make them a desired human resource?

Notes			

### Section 4

# Louisiana's Modern Economy

### As you read, look for

affected Louisiana

- the manufacturing plants, service industries, and economic institutions that provide jobs in Louisiana;
- the U.S. trade policies that affect Louisiana's place in the global economy;
- economic indicators that measure an economy's strength:
- terms: corporation, right-to-work laws, tariff, Gross Domestic Product (GDP), Consumer Price Index (CPI).

As we have learned, an economic system uses natural, capital, and human resources to produce goods and provide services. Louisiana's economy generates a wide variety of goods and services. Many of the state's economic activities are shaped by its abundant natural resources and by its distinctive cultural assets.



### Social Studies Standard 7—Global Awareness

Students interpret the role of Louisiana in a global society.

8.7.1 Explain how the United States and world foreign policy have

# Social Studies Standard 10—Interdependence and Decision Making

Students use economic knowledge and skills to make decisions as individuals, families, groups, or businesses in the interdependent and changing state, nation, and world.

**8.10.3** Describe historical factors influencing the economic growth, interdependence, and development of Louisiana

**8.10.4** Explain the impact of inflation and unemployment on different groups

### **Section 4**

## Louisiana's Modern Economy

### **INTRODUCE**

### **Outline**

- A. Manufacturing
- **B.** Service Industries
- C. Economic Institutions
- D. Louisiana in the U.S. and Global Economies
- E. Trade Policies
- F. Measuring the Economy

### **Materials**

Textbook, pages 93-99
Student Workbook
Teacher Tech DVD
Lesson Plan
Guided Reading, 3-4
mystatehistory.com
Online Textbook

### **Bellringer**

Ask students to predict Louisiana's rank among the 50 states in per capita (per person) income. Also, predict Louisiana's per capita income. (As of 2012, Louisiana ranked 29th with a per capita income of \$39,413.)

### **Did You Know?**

The state with the highest per capita income is Connecticut (\$58,908). Ask students: How much more money would the average Louisianian have to earn to exceed Connecticut's per capita income? (\$19,495)

### **Higher Level Thinking**

Ask students: How would you attempt to improve Louisiana's economy?

### **Engagement**

Divide your class into heterogeneous groups of five students. Have student groups prepare a three-minute video promoting tourism in Louisiana. For example, each student group could be assigned to promote tourism in a different cultural region of Louisiana. Be sure to assign a specific role/task for each student in the group, such as director, scriptwriter, props manager, scenery and costume creator, and researcher.

### **Think Local**

Ask students to describe the impact of tourism on the economy of your parish. What are the major tourist attractions in your area? What could local government and civic groups do to increase tourism in your parish?

# Using Pictures and Illustrations

Have students identify each of the service industry workers in the picture on this page. What other service industry workers could they add to this picture?

**Right:** Glass is one of many products manufactured in Louisiana. **Below:** Service workers come in many forms.



The Motion Picture
Association of America
estimates that film and
television productions
provide more than 8,000
jobs and generate more than
\$375 million in wages in
Louisiana each year.



### Manufacturing

Several hundred products are manufactured in Louisiana. They include ships, trucks, electrical equipment, glass products, and mobile homes. Some of these goods are shipped out of state and sold throughout the world.

Petroleum refineries process oil and produce billions of gallons of gasoline each year. Other chemicals are created in the refining process, and those are used to make hundreds of other products including fertilizers and plastics. Louisiana ranks second in the United States in the production of petrochemicals.

### **Service Industries**

Tourism is a major service industry in Louisiana. Tour guides and taxi drivers are two kinds of service workers. Tourists visit Louisiana each year to enjoy the culture that makes the state special. While here, they sightsee, eat, shop, fish, hunt, and join the crowds at one of our many festivals. The economic activities of these travelers add billions of dollars to the state's economy each year.

Even when people do not visit, they might see parts of Louisiana in one of the many films made in the state each year. Because of its beauty, and with help from tax credits designed to attract the film industry, Louisiana has become a very popular place for film and television production.



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# **Special** FEATURE

# Louisiana: The Hollywood of the South

Lights! Camera! Action! Louisiana is becoming a star, at least as a location for movies and television shows. In 2002, when the government of Louisiana began offering tax credits to movie and television companies, many of them decided to film in Louisiana. The tax credits mean that the production company can save money if they choose to work in the state. When producers choose Louisiana, they buy goods and services from our businesses. They also hire citizens as workers, which helps the state's economy.

As a result of the tax credits, Louisiana is quickly becoming one of the most popular places to produce movies, earning it the nickname "Hollywood of the South." Over \$2 billion in revenue has been generated by the tax credits since 2002. In 2008 alone, over 80 major film and television projects were produced in Louisiana and over \$500 million was spent within the state. New Orleans, Baton Rouge, and Shreveport are becoming popular filming locations.

The first movie to be made in Louisiana was a silent film called *Tarzan of the Apes*, which was filmed in 1918. Since then, almost 500 movies have been filmed in Louisiana including *Interview with the Vampire* (1994), *A Streetcar Named Desire* (1951), *Steel Magnolias* (1989), and *The Curious Case of Benjamin Button* (2008). Famous television shows filmed in Louisiana include *Swamp People, True Blood, Cajun Pawn Stars*, and *Duck Dynasty*. In addition to creating revenue for the government of Louisiana, many famous Hollywood stars are involved with charities dedicated to helping the people of our state. Some of these celebrities include Morgan Freeman, Jonah Hill, 50 Cent, Sylvester Stallone, Brad Pitt, and Channing Tatum. What is your favorite movie or television show connected with Louisiana?







Far Left: Some filming for the movie The Curious Case of Benjamin Button was conducted in the Garden District of New Orleans. Left: Duck Dynasty is filmed in the Monroe area of northeast Louisiana. Above: The 1918 silent film Tarzan of the Apes used the swamps around Morgan City to represent African jungles.

### **Using the Internet**

Have students go to http://la.reelscout.com/loc\_results.aspx and, in the left-hand column under Geographic Area, search for the name of your hometown. By clicking "Search," they can discover if there are any film locations in your local area. (If there are none in your hometown, they can expand the search to your parish or to a nearby larger city.) What are the characteristics of the film locations in your area? (Do they feature plantation homes? An old-fashioned downtown street? Beautiful farmland?) What kinds of movies would be made in locations like those in your area?

### **Using Writing Skills**

Once students have discovered the film locations in your local area, have them write a business letter to an imaginary film studio, encouraging the studio to use your town or area for their next film. The website <a href="https://www.jumpstart.com/common/business-letters-view">www.jumpstart.com/common/business-letters-view</a> has a template for a business letter that might be useful for this project.

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### **Think Local**

Have students contact the local chamber of commerce or the appropriate local government department to find out the nature of the businesses in your town or parish. How many banks are located in your municipality? Do any large corporations have a presence there? What are the largest employers in your town or parish?

### **Answer to Figure 3.5 Skill**

Medical facilities are among the largest employers in Louisiana. Students may see other patterns.

### **Conducting Research**

Working as individuals or as a small group (depending on the size of your class), have students research each of the employers in Figure 3.5. Then have each group give a short oral presentation on its findings.



### Figure 3.5

Louisiana's Largest Private Sector Employers

Some of Louisiana's employers have thousands of employees. What patterns can you see in the list of the state's largest employers?

### **Economic Institutions**

An institution is an organization founded by people who come together for a specific purpose. An economic institution focuses on economic activities like the production of goods or the provision of services. Common examples of economic institutions include banks, small businesses, corporations, and labor unions.

Banks are central institutions in modern economies. They hold money for customers and provide ways to access it when it is needed. Banks also loan money to individuals and many kinds of businesses. These loans help businesses grow and prosper.

Small businesses tend to be owned by an individual or a few partners. They often have fifty employees or fewer. Larger businesses often become corporations. A **corporation** is a large, complex business enterprise that has many investors (called shareholders). No matter their size, all businesses have the goal of making a profit while producing goods or providing services.

People who work for similar kinds of businesses sometimes form an economic institution called a labor union. Union members work together to negotiate for good wages and safe working conditions. Labor unions were very influential in the first half of the twentieth century. In the decades that followed, many states passed <code>right-to-work laws</code> (laws that make it clear that no one can be forced to join a union to get a certain kind of job). Louisiana passed a right-to-work law in 1976. Unions say these laws take away their ability to improve wages and protect workers. Many business owners believe right-to-work laws keep unions from pushing wages so high they cannot make a profit.

#	Employer	City	# of Employees
1	Northrop Grumman Ship Systems	Avondale	6000
2	GM Shreveport Assembly Plant	Shreveport	2290
3	NASA Michoud	New Orleans	2000
4	Foster Poultry Farms	Farmerville	1800
5	Dow Chemical Co	Hahnville	1700
6	Exxon Mobil Chemical Co	Baton Rouge	1700
7	US National Finance Center	New Orleans	1700
8	PPG Industries Inc	Westlake	1658
9	Stuller Inc	Lafayette	1600
10	Boh Bros Construction Co LLC	New Orleans	1500
11	Chevron Production	Covington	1500
12	Citgo Petroleum Corp	Sulphur	1500
13	Guard Gate-Lube Plant	Sulphur	1500
14	Shaw Environmental Infrastructure	Baton Rouge	1500
15	Tidewater Marine LLC	Amelia	1500

Source: Mississippi State College of Business.

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### Section 4: Louisiana's Modern Economy



Louisiana in the U.S. and Global Economies

From the time of its founding, Louisiana's economy has had international aspects. The Mississippi River and its access to the Gulf of Mexico helped Louisiana become an important location for *exporting* and *importing* (sending and receiving) goods. Advances in transportation and communication have created an interconnected international economy. Both the United States and Louisiana play important roles in the international economy.

The state's ports provide evidence of how Louisiana plays its role. New Orleans and Baton Rouge have two of the nation's top five deepwater ports. The state has four additional deep-draft ports that import and export raw materials and manufactured goods. These six ports combined handle more than 270 million tons of cargo each year.

Louisiana also has a massive port twenty miles off the coast of Lafourche Parish. It is dedicated solely to transporting oil and gas from ships so large they cannot come into regular ports. That is why the facility is called a superport. Once transferred from large ships called supertankers, the oil and gas travel inland through underwater pipelines. This facility is the only one of its kind. It handles more than 10 percent of all the crude oil imported into the United States.

**Trade Policies** 

The United States has developed new policies and agreements that reflect its role in the global economy. The North American Free Trade Agreement (NAFTA) removed trade restrictions with our geographic neighbors, Canada and Mexico, to make business across these international borders easier. Many businesses moved their manufacturing facilities to Mexico where labor was cheaper. Louisiana lost some textile factories and jobs as a result. While there are downsides, NAFTA has also made it more efficient for Canada to send its abundant oil resources into the United States through a system of pipelines.

Left: This marine terminal is part of the Louisiana Offshore Oil Port (LOOP), which is the single-largest point of entry for crude oil coming into the United States by water. LOOP has offloaded over 11 billion barrels of foreign and domestic crude oil since it was built in the 1970s. Below: Canada, the United States, and Mexico are linked through the North American Free Trade Agreement (NAFTA).

### **Lagniappe**

Louisiana had three "Fortune 500" companies in 2013. meaning they were on Fortune magazine's list of the highest-grossing companies in the U.S. The companies were CenturyLink, the communications company based in Monroe: Entergy. the electric power company based in New Orleans; and the Shaw Group in Baton Rouge. (The Shaw Group has since been acquired by a larger company.) The top three companies in the U.S. were Wal-Mart, ExxonMobil. and Chevron.



### **Higher Level Thinking**

Ask students: What are the top three export markets for Louisiana goods and products? (*China, Japan, and Mexico*) What are the top five Louisiana goods and products exported? (*mineral fuels, oil seeds, cereals, organic chemicals, and plastics*)

### **Using the Internet**

The website of the Louisiana Offshore Oil Port (LOOP) has a wealth of information about the port. Have students go to **www.loopllc.com/Home** and compile a list of ten interesting facts they learn about this important part of our economy.

### **Staying Up to Date**

Have students conduct research to discover if the "Fortune 500" companies in Louisiana have changed since 2013. They can go to <a href="http://fortune.com/fortune500/">http://fortune.com/fortune500/</a> to see the latest list. (It can be filtered by state.) They should also notice whether Wal-Mart, ExxonMobil, and Chevron have maintained their ranking as the top three U.S. companies.

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### **Using the Internet**

- Share with your students this video (25:09) on the impact of NAFTA, as found at this website: http://video.pbs.org/video/2161621573/.
- Share with your students this video (5:01) explaining the concept of GDP, as found at this website: www.npr.org/blogs/money/2011/10/26/141741360/video-what-is-gdp.

### **Answer to Figure 3.6 Skill**

An economic downturn that is sometimes called the "Great Recession" began late in 2008. The worst of the recession happened in 2009. In that year, consumers were buying less because of high unemployment and economic uncertainty, so fewer goods were being produced because of this decreased demand.



The United States has the largest Gross Domestic Product of any country. China, Japan, Germany, and France round out the top five nations in terms of GDP.

NAFTA provides evidence that the U.S. is moving away from an economy with protective tariffs to one that relies more on free trade. A **tariff** is a tax placed on a good imported into the United States. The purpose of a tariff is to protect a U.S. producer from the cheaper goods made by its international competitors.

Many believe free trade is good because it has made many foreign consumer goods more affordable. Some sugar and rice farmers are not so sure. For decades they have relied on tariffs to protect their share of the U.S. market from foreign competitors who can produce sugar and rice more cheaply.

### **Measuring the Economy**

Economists gather information to measure an economy's strength by using a variety of economic indicators. In turn, businesses, individuals, and the government use the information from economic indicators to make better economic decisions.

One of the most important economic indicators is the **Gross Domestic Product (GDP)**. It measures the total value of the final goods and services produced in the United States in a certain time period, usually one year.



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### Section 4: Louisiana's Modern Economy

The **Consumer Price Index (CPI)** is an economic indicator that measures prices. Each month, the prices of goods and services are checked to see if they rose or fell in comparison to previous months.

When the CPI shows that prices are rising steadily, this indicates *inflation* (a continual increase in the price of goods and services). In this situation, price increases mean a buyer can afford less with the same amount of money. If wages do not increase at a level to keep up with inflation, a consumer's spending power goes down even further.



The unemployment rate is another very important economic indicator. Each month, a government report shows the percentage of people who are out of work and are looking for jobs. If the supply of jobs is low, workers are often willing to accept lower pay in order to have a job. If unemployment rates are low, businesses will have to pay a higher wage because the supply of available workers is smaller.

### **Reviewing the Section**

- 1. Define in sentence form: corporation, tariff, Gross Domestic Product (GDP).
- Which Louisiana facility handles more than 10 percent of all the crude oil imported into the United States? How is the oil transported to shore?
- 3. Why are sugar and rice farmers not happy with free trade agreements like NAFTA?

### Figure 3.7

U.S. Annual Consumer Price Index

In what year was there a negative rate of inflation?
Do you think that has any

connection with the same year on the graph in Figure 3.6?

Lagniappe

To calculate the consumer price index, "economic assistants" from the U.S. Bureau of Labor Statistics visit or call thousands of retail stores, service establishments, rental units, and doctors' offices all over the country and record the prices of about 80,000 items each month.

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### **Answer to Figure 3.7 Skill**

The greatest "deflation" (the opposite of inflation) took place in 2009. That year had a decrease in GDP because there was less demand for consumer goods. When demand goes down, prices do as well.

### **ASSESS**

# Answers to "Reviewing the Section"

- 1. A corporation is a large, complex business enterprise that has many investors (called shareholders). A tariff is a tax placed on a good imported into the United States. Its purpose is to protect a U.S. producer from the cheaper goods made by its international competitors. The Gross Domestic Product (GDP) is an economic indicator that measures the total value of the final goods and services produced in the United States in a certain time period, usually one year.
- 2. The massive superport located twenty miles off the coast of Lafourche Parish transports oil and gas from supertankers that are so large they cannot come into regular ports. The oil and gas travel to shore through underwater pipelines.
- **3.** Free trade agreements remove the tariffs that have, for decades, protected their share of the U.S. market from foreign competitors who can produce sugar and rice more cheaply.

### CHAPTER REVIEW

# Reviewing the Content: Trivial Pursuit

Incorporate the help of your students to create a social studies version of Trivial Pursuit. Assign each row the responsibility of creating questions (and answers) for an assigned category, which might include "Basic Economic Concepts," "Louisiana's Economic History," "Louisiana's Resources," "Louisiana's Modern Economy," "Terms," and "Miscellaneous." Using a Trivial Pursuit board, have each row of students play the other rows trying to collect all the pieces of pie and make it back to the center square.

# Chapter Review

### **Chapter Summary**

## Section 1: Basic Economic Concepts

- The term economy refers to how people manage material resources in a household, city, state, or nation.
- Human beings have needs and wants, which are
  often satisfied through the acquisition of goods and
  services. Consumers are people who acquire goods
  and services; producers use resources to provide
  these goods and services.
- There are three types of economic resources: natural, human, and capital. Natural resources come from Earth; human resources are the persons who produce goods and services; and capital resources are the tools used in the production of goods and services.
- Scarcity is an economic concept referring to the choices consumers and producers make regarding limited resources.
- In a market economy, the price of a good or service is determined by the law of supply and demand.
- An economy may be a traditional economy, a command economy, or a market economy. The type of economy depends on the answers to four basic questions: what to produce, how to produce, for whom to produce, and how much to produce.

### Section 2: Louisiana's Economic History

- Prior to the arrival of Europeans, Native Americans had a traditional economy involving hunting, farming, and trading.
- Mercantilism is a command economy intended to enrich the mother country (e.g., France) through trade with its colonies.
- By the time the United States acquired Louisiana in 1803, a market economy was emerging. Sugar and cotton were very profitable cash crops grown in Louisiana.
- The discovery of oil in Louisiana has enriched the state, but the economy has suffered from its dependence on petroleum, especially when the price of oil drops.

### **Section 3: Louisiana's Resources**

- An economic system uses natural, human, and capital resources to produce goods and services.
- Natural resources are products of Earth and its atmosphere. Louisiana's climate, soil, and abundant water resources support a variety of goods and products in agriculture, forestry, and fisheries.
- Capital resources, such as processing facilities, machines, and equipment, transform natural resources to products.
- Human resources provide the physical and/or mental labor to transform a resource into a good or service.

### Section 4: Louisiana's Modern Economy

- Hundreds of products are manufactured in Louisiana including ships, trucks, electrical equipment, glass products, and mobile homes.
- Louisiana is the second-leading producer of petrochemicals in the United States.
- For more than a decade, there has been a rapid growth in the motion picture and television industry in Louisiana.
- The North American Free Trade Agreement (NAFTA) removed trade restrictions with our geographic neighbors. While many businesses moved their manufacturing facilities to Mexico where the labor was cheaper, this agreement has made consumer goods more affordable by the removal of protective tariffs.
- An important economic indicator is the Gross Domestic Product (GDP), which is the total value of the final goods and services produced in a certain time period.
- The Consumer Price Index (CPI) is an economic indicator that measures prices. Each month, the prices of goods and services are checked and compared with the prices of previous months to see if they rose or fell.

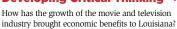
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### **Activities for Learning**

### **Understanding the Facts**

- What is the study of economics called at the smallest level? the largest level?
- 2. In a market economy, what are the two factors that influence the price of a good or service?
- 3. What are the three types of economic systems discussed in this chapter?
- 4. How did mercantilism limit colonial trade?
- 5. Historically, what were Louisiana's two most important cash crops?
- 6. Which company built Louisiana's first oil refinery? When?
- 7. Today, what are Louisiana's four most profitable food crops?
- 8. In Louisiana, what is the most common sawtimber?
- What types of Louisiana seafood are harvested by commercial fisherman and shipped all over the country?
- 10. How much of the nation's natural gas deposits are in Louisiana?
- 11. What is Louisiana's rank in the United States in the production of petrochemicals?
- 12. What type of industry is tourism?
- 13. What term refers to a tax placed on an imported good?
- 14. Which index places an annual value on the final goods and services produced in a country?

### **Developing Critical Thinking**



### **Exploring Louisiana** on the Internet



## **Building 21st-Century Skills:** Creating a Pie Chart



A pie chart is a circular graph divided into sections with each section showing the relative size of the quantities represented. The purpose of a pie chart is to show how much a category contributes to the whole. To create this chart, you need colored pencils, paper, a compass, and a ruler.

The first step in creating a pie chart is to create a title for your chart based on the categories of data (or facts) you are comparing. In this chart, you are going to use the crop data found in the last paragraph of page 83, so select a title with this in mind. The second step is to determine the whole. (Add the total dollar value of the four major crops grown in Louisianasoybeans, corn, sugarcane, and rice.) The third step is to determine what percentage each category (or crop) is of the whole. For example, divide the value of soybeans (in millions) by the total dollar value of the four crops (in millions) and multiply by  $100\ (700$  $\div$  2,257  $\times$  100 = 38%). Repeat this step for the other three crops. The fourth step is to draw a circle on your paper using a compass; this represents the whole dollar value (100%) of the four major crops. Then divide your circle into sections corresponding to the percentage of the whole that each crop represents. Finally, shade each section a different color and label

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# Notes ...

# Answers to "Activities for Learning"

### **Understanding the Facts**

- microeconomics; macroeconomics
- 2. supply and demand
- **3.** traditional economy, command economy, and market economy
- **4.** Colonists were only allowed to purchase goods from the mother nation.
- 5. sugar and cotton
- 6. Standard Oil Company; 1909
- 7. soybeans, corn, sugarcane, and rice
- 8. pine
- 9. crabs, oysters, and shrimp
- 10. more than 25 percent
- 11. second
- 12. service industry
- 13. tariff
- **14.** Gross Domestic Product (GDP)

### **Developing Critical Thinking**

The movie and television industry purchases goods and services in Louisiana and hires Louisiana workers. The growth of this industry has increased state revenue. Many stars are involved in charities that benefit the people of Louisiana.

### **Exploring Louisiana on the Internet**

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### **Building 21st-Century Skills**

Check students' pie charts.