



National Economics Standards

What Citizens Need to Know About Economics addresses the National Council on Economic Education economics standards for Grade 12.



Economics Standards and Benchmarks

Content Standard 1—Productive resources are limited. Therefore, people can not have all the goods and services they want; as a result, they must choose some things and give up others.

Benchmark Grade 12

1. Choices made by individuals, firms, or government officials often have long run unintended consequences that can partially or entirely offset the initial effects of the decision.

- *Chapter 2 identifies the choices individuals and businesses have in deciding between their needs and wants.*
- *Chapter 4 examines the choices consumers have in balancing the relative costs and values of goods and services.*
- *Chapter 6 discusses the consequences of credit and debt on the individual and government.*
- *Chapter 9 examines the consequences of decisions made by businesses.*
- *Chapter 11 explains the consequences of banking decisions.*
- *Chapter 12 discusses the choices government officials must make in deciding on budgetary issues.*

Content Standard 2—Effective decision making requires comparing the additional costs of alternatives with the additional benefits. Most choices involve doing a little more or a little less of something; few choices are "all or nothing" decisions.

Benchmarks Grade 12

1. Marginal benefit is the change in total benefit resulting from an action.
Marginal cost is the change in total cost resulting from an action.

- *Chapter 8 discusses the laws of supply and demand and how it balances the cost versus the benefit of an action. Growing and selling tomatoes and raising the price of a meal at a restaurant are cited as examples. Graphics are provided to help illustrate these concepts.*

2. As long as the marginal benefit of an activity exceeds the marginal cost, people are better off doing more of it; when the marginal cost exceeds the marginal benefit, they are better off doing less of it.

- Chapter 4 defines the law of diminishing utility as the point when too much of a product becomes more of a hindrance than a benefit. Specific examples are cited. An illustration is provided to demonstrate this concept.

3. To produce the profit-maximizing level of output and hire the optimal number of workers, and other resources, producers must compare the marginal benefits and marginal costs of producing a little more with the marginal benefits and marginal costs of producing a little less.

- Chapter 7 describes the law of diminishing returns in which the added cost of labor, or other factors of production, outweigh the added benefit gained by the extra resources. Specific examples with illustrations are provided.

4. To determine the optimal level of a public policy program, voters and government officials must compare the marginal benefits and marginal costs of providing a little more or a little less of the program's services.

- Chapter 12 explores the decisions governments must make in comparing the cost and benefit of government programs such as Social Security and Medicare. Government waste is discussed, as is the budget-making process. Web links to governmental agencies, such as the Office of Management and Budget and the Congressional Budget Office, are provided.

- Chapter 15 defines the term cost/benefit analysis in which the cost of a program is measured against the benefits received from the program.

- Chapter 20 explores issues related to federal subsidies such as Social Security, Medicare and Medicaid. The cost and benefit of these programs are discussed and Web links to the government agencies that oversee these programs are provided.

Content Standard 3—Different methods can be used to allocate goods and services. People acting individually or collectively through government, must choose which methods to use to allocate different kinds of goods and services.

Benchmark Grade 12

1. Comparing the benefits and costs of different allocation methods in order to choose the method that is most appropriate for some specific problem can result in more effective allocations and a more effective overall allocation system.

- Chapter 3 identifies different economic systems and their allocation methods including an in-depth comparison of capitalist, socialist and communist economic systems. Influential philosophers such as Adam Smith and Karl Marx are discussed and Web links to their biographies and the complete texts of their most influential works are provided.

Content Standard 4—People respond predictably to positive and negative incentives.

Benchmarks Grade 12

1. Acting as consumers, producers, workers, savers, investors, and citizens, people respond to incentives in order to allocate their scarce resources in ways that provide the highest possible returns to them.

- Chapter 4 explores the role of the consumer in the economic system. Consumers' incentives are discussed as it affects the choices they make and in turn the choices the producers make.
- Chapter 8 defines the laws of supply and demand and its influence on the allocation of resources. Growing and selling tomatoes and raising the price of a meal at a restaurant are cited as examples.

2. Small and large firms, labor unions and educational, and other not-for-profit organizations have different goals and face different rules and constraints. These goals, rules, and constraints influence the benefits and costs of those who work with or for those organizations, and, therefore, their behavior.

- Chapter 7 describes the role of business enterprises in the economic system. Web links to the Small Business Administration and other governmental agencies are provided for further research.

- *Chapter 9 examines business ethics and identifies rules and constraints placed on businesses by government and society. Links to Web sites and related articles explore current incidents where corporations have been cited for ethics violations.*
- *Chapter 10 identifies the role of labor in the economic system. The goals of labor unions and constraints placed on labor unions are discussed. Web links to the AFL-CIO, the Teamsters and other labor organizations are provided for further research.*

Content Standard 5—Voluntary exchange occurs only when all participating parties expect to gain. This is true for trade among individuals or organizations within a nation, and usually among individuals or organizations in different nations.

Benchmarks Grade 12

1. A nation pays for its imports with its exports.

- *Chapter 22 explores issues related to foreign trade. The importance of trade is stressed and the effects of trade barriers are discussed. Web links to major international trade organizations, such as the North American Free Trade Agreement and the Association of South East Asian Nations, are provided for further comparison. A history of U.S. trade policy is also provided.*
- *Chapter 23 explores the importance of trade in the globalized economy of the 21st century. The roles of major international organizations such as the World Bank and the International Monetary Fund are discussed and Web links to these and other important international organizations are provided.*

2. When imports are restricted by public policies, consumers pay higher prices and job opportunities and profits in exporting firms decrease.

- *Chapter 22 identifies the effects of trade restrictions on businesses, consumers and labor. Links to newspaper and magazine articles provide examples of current trade disputes and their repercussions.*

Content Standard 6—When individuals, regions, and nations specialize in what they can produce at the lowest cost and then trade with others, both production and consumption increase.

Benchmarks Grade 12

1. Two factors that prompt international trade are international differences in the availability of productive resources and differences in relative prices.

- Chapter 22 explores issues related to international trade and identifies the factors that give the United States advantages and disadvantages in international markets. Web links provide added information on such things as the importance of natural resources for a nation's trade balance. Key concepts such as specialization and comparative advantage are defined in this chapter.

2. Transaction costs are costs (other than price) that are associated with the purchase of a good or service. When transaction costs decrease, trade increases.

- Chapter 23 identifies transaction costs such as foreign currency exchange rates and includes Web links that can provide current international currency exchange rates for comparative purposes. The effect of the currency exchange rates on foreign trade is also discussed, as is the concept of balance of payments.

3. Individuals and nations have a comparative advantage in the production of goods or services if they can produce a product at a lower opportunity cost than other individuals or nations.

- Chapter 21 discusses the impact of foreign trade on American farms. Key concepts such as opportunity cost are defined.
- Chapter 22 defines the term comparative advantage and relates the concept to U.S. foreign trade relations.
- Chapter 24 describes how the concept of comparative advantage affects the position of developing countries in international markets. Efforts to improve the comparative advantage of developing countries are discussed and Web links to international aid organizations such as the Grameen Bank and the U.S. Agency for International Development are provided.

4. Comparative advantages change over time because of changes in factor endowments, resource prices, and events that occur in other nations.

- *Chapter 22 provides a history of U.S. trade policy and explores the rise of international trade organizations that has led to the interdependence of the world's economies. Web links to organizations such as the European Union and the North American Free Trade Agreement are available for further insight.*
- *Chapter 23 explores issues related to globalization such as the contagion effect of the international monetary system. The 1997 Asian financial crisis is cited as an example of the interdependence of the world's economies. Web links to international organizations such as the International Monetary Fund and the World Bank are provided for further research.*

Content Standard 7—Markets exist when buyers and sellers interact. This interaction determines market prices and thereby allocates scarce goods and services.

Benchmarks Grade 12

1. A shortage occurs when buyers want to purchase more than producers want to sell at the prevailing price.

- *Chapter 8 explores issues associated with the laws of supply and demand. Consumer demand for tomatoes is cited as an example and graphics are used to illustrate these concepts.*

2. A surplus occurs when producers want to sell more than buyers want to purchase at the prevailing price.

- *Chapter 8 explores issues associated with the laws of supply and demand. Web links and full text articles pertaining to these topics are provided for further research.*

3. Shortages of a product usually result in price increases in a market economy; surpluses usually result in price decreases.

- *Chapter 8 explores issues associated with the laws of supply and demand. Illustrations are provided to describe the changes in price caused by shortages or surpluses of products.*

4. When the exchange rate between two currencies changes, the relative prices of the goods and services traded among countries using those currencies change; as a result, some groups gain and others lose.

- Chapter 23 explores issues related to currency exchange rates. The affects of changes in the currency market are discussed and a Web link to a currency conversion program is provided to give the most current currency exchange rates for comparative purposes.

Content Standard 8—Prices send signals and provide incentives to buyers and sellers. When supply or demand changes, market prices adjust, affecting incentives.

Benchmarks Grade 12

1. Demand for a product changes when there is a change in consumers' incomes or preferences, or in the prices of related goods or services, or in the number of consumers in a market.

- Chapter 4 describes the role consumers play in setting the price for a product or service. An illustration is provided to demonstrate how demand leads to production.

2. Supply of a product changes when there are changes in either the prices of the productive resources used to make the good or service, the technology used to make the good or service, the profit opportunities available to producers by selling other goods or services, or the number of sellers in a market.

- Chapter 8 identifies factors that affect the supply and demand of a product. The supply and demand for tomatoes are cited as examples and graphics are provided to illustrate changes in the marketplace.

3. Changes in supply or demand cause relative prices to change; in turn, buyers and sellers adjust their purchase and sales decisions.

- Chapter 8 provides an overview of the laws of supply and demand. Graphics and charts are provided to help illustrate how changes in supply or demand affect the marketplace.

4. Government-enforced price ceilings set below the market-clearing price and government-enforced price floors set above the market-clearing price distort price signals and incentives to producers and consumers. The price ceilings cause persistent shortages, while the price floors cause persistent surpluses.

- Chapter 21 identifies how government subsidies for farmers affect the laws of supply and demand. Links to related articles and Web sites on such issues as the Freedom to Farm Act and the 2002 Farm Bill are provided for further research.

Content Standard 9—Competition among sellers lowers costs and prices, and encourages producers to produce more of what consumers are willing and able to buy. Competition among buyers increases prices and allocates goods and services to those people who are willing and able to pay the most for them.

Benchmarks Grade 12

1. The pursuit of self-interest in competitive markets generally leads to choices and behavior that also promote the national level of economic well-being.

- Chapter 3 identifies the basic ideologies of capitalism, including concepts identified by Adam Smith and other economic philosopher's such as the concept of an "invisible hand" that guides the marketplace. Web links to biographies of Adam Smith and other economic philosophers and the complete texts of their most influential works are provided for further research.

2. The level of competition in an industry is affected by the ease with which new producers can enter the industry and by consumers' information about the availability, price and quantity of substitute goods and services.

- Chapter 4 identifies trends that affect consumer choices in the marketplace. Web links to consumer protection agencies are provided for further research.
- Chapter 7 explores issues related to business ventures such as the affect of competition on the marketplace. Links to related articles and Web sites are provided for further reference.

3. Collusion among buyers or sellers reduces the level of competition in a market. Collusion is more difficult in markets with large numbers of buyers and sellers.

- Chapter 9 examines how monopolies and oligopolies limit the amount of competition in the marketplace. Business ethics are discussed and Web sites and articles are provided to identify current issues related to unethical business practices and the response of government and society.

4. The introduction of new products and production methods by entrepreneurs is an important form of competition and is a source of technological progress and economic growth.

- Chapter 7 identifies the role entrepreneurs play in introducing new products and production methods to the marketplace and the affect that has on competition. Successful entrepreneurs such as Ray Kroc, the founder of McDonald's, and Bill Gates, the founder of Microsoft, are cited as examples of successful entrepreneurs and Web links provide biographies of these and other influential individuals in the business world.

Content Standard 10—Institutions evolve in market economies to help individuals and groups accomplish their goals. Banks, labor unions, corporations, legal systems, and not-for-profit organizations are examples of important institutions. A different kind of institution, clearly defined and enforced property rights, is essential to a market economy.

Benchmarks Grade 12

1. Property rights, contract enforcement, standards for weights and measures, and liability rules affect incentives for people to produce and exchange goods and services.

- Chapter 3 identifies how property rights are factors that differentiate capitalism and socialism from communism. The effects of property rights on the marketplace are discussed. Web links to biographies of famous economic philosophers such as Adam Smith and Karl Marx are provided along with the complete texts of their most influential works.

- Chapter 12 explores the role the government plays in regulating the marketplace. Web links to governmental regulatory agencies such as the Federal Trade Commission and the Food and Drug Administration are provided.

2. Incorporation allows firms to accumulate sufficient financial capital to make large-scale investments and achieve economies of scale. Incorporation also reduces the risk to investors by limiting stockholders' liability to their share of ownership of the corporation.

- Chapter 7 examines how different forms of incorporation influence the marketplace. The role of stockholders and the stock market is discussed and Web links to major stock exchanges around the world including the stock exchanges of London, New York and Tokyo are provided.

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

Benchmarks Grade 12

1. The basic money supply in the United States consists of currency, coins, and checking account deposits.

- Chapter 11 examines all the issues related to money and banking. The money supply is defined and the role of the Federal Reserve System is discussed. Web links to all 12 Federal Reserve Banks are provided along with links to the Federal Open Market Committee and the Board of Governors.

2. In many economies, when banks make loans, the money supply increases; when loans are paid off, the money supply decreases.

- Chapter 11 identifies how banks and the Federal Reserve System work to maintain a stable money supply and regulate the economy. The affects of loans and changes in interest rates are illustrated in graphics to demonstrate how banks create money. Different types of banks are identified and Web links are provided to such institutions as the Federal Deposit Insurance Corporation (FDIC) to allow for further research.

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

Benchmarks Grade 12

1. An interest rate is a price of money that is borrowed or saved.

- Chapter 11 defines the term interest rate as it relates to loans between banks and other institutions and individuals.

2. Like other prices, interest rates are determined by the forces of supply and demand.

- Chapter 11 identifies the role the Federal Reserve System plays in setting interest rates by adjusting the discount rate of loans the Federal Reserve Banks set for member banks. Web links to all aspects of the Federal Reserve System are provided for more research and current statistics on interest rates.

3. The real interest rate is the nominal or current market interest rate minus the expected rate of inflation.

- Chapter 15 defines the concept of real interest rates as it is affected by inflation. Links to related articles and Web sites are provided for further research.

4. Higher real interest rates provide incentives for people to save more and borrow less. Lower real interest rates provide incentives for people to save less and borrow more.

*- Chapter 15 defines the concept of real interest rates and other factors that affect a growing economy.
- Chapter 17 explains how the Federal Reserve Board adjusts interest rates to encourage more or less borrowing. Web links to the Federal Reserve System are provided for current statistics on monetary policy.*

5. Real interest rates normally are positive because people must be compensated for deferring the use of resources from the present into the future.

- Chapter 15 defines the concept of real interest rates as they are affected by inflation. Links to related articles and Web sites are provided for further research.

6. Riskier loans command higher interest rates than safer loans because of the greater chance of default on the repayment of the risky loan.

*- Chapter 6 examines the risks of buying on credit to the consumer and the economy as a whole. Links to articles and Web sites are provided that explore this issue and give advice on maintaining proper credit.
- Chapter 11 identifies how high-risk loans led to the Savings and Loan crisis of the 1980s. Related articles on this topic are provided for further research. The concepts of moral hazard, risking other people's money for personal gain, and redlining, the practice of restricting loans or charging higher interest rates to minorities or those in low-income neighborhoods, are defined.*

7. Higher interest rates reduce business investment spending and consumer spending on housing, cars, and other major purchases. Policies that raise interest rates can be used to reduce these kinds of spending, while policies that decrease interest rates can be used to increase these kinds of spending.

- *Chapter 11 identifies how the Federal Reserve Board adjusts the discount rate—interest rates to member banks—in order to influence the economy. Web links to the Federal Reserve System are provided for current information on monetary policy.*
- *Chapter 17 identifies the role interest rates play in regulating the economy. The concepts of monetary and fiscal policy are discussed and Web links provide further insight into these issues.*

Content Standard 13—Income for most people is determined by the market value of the productive resources they sell. What workers earn depends, primarily, on the market value of what they produce and how productive they are.

Benchmarks Grade 12

1. Changes in the structure of the economy, the level of gross domestic product, technology, government policies, and discrimination can influence personal income.

- *Chapter 10 explores issues related to the labor market including the influence of technology and government policies. Web links to major labor organizations and the complete texts of influential governmental legislation related to labor are provided.*
- *Chapter 14 defines the gross domestic product (GDP) and identifies how it reflects and influences the economy. Web links to current GDP figures are provided.*
- *Chapter 18 examines issues related to economic classes. The effects of discrimination and government regulations on personal income are discussed.*

2. In a labor market, in the absence of other changes, if wage or salary payments increase, workers will increase the quantity of labor they supply and firms will decrease the quantity of labor they demand.

- *Chapter 7 defines the law of diminishing returns, which identifies the effects of changes to the labor force and other factors of production. A graphic is provided to illustrate this concept.*
- *Chapter 8 defines the laws of supply and demand and graphics are provided to illustrate these concepts.*
- *Chapter 10 explores issues associated with the labor movement. The concept of a living wage and the effects of the laws of supply and demand on the labor market are discussed and links to related articles and Web sites are provided for further insight.*

3. Changes in the prices for productive resources affect the incomes of the owners of those productive resources and the combination of those resources used by firms.

- *Chapter 2 defines the term "factors of production" and explains how a change in one factor of production—land, labor or capital—affects the others. Graphics are provided to illustrate this concept.*
- *Chapter 7 identifies how changes in the factors of production affect a business. The concept of diminishing returns is defined and illustrated.*

4. Changes in demand for specific goods and services often affect the incomes of the workers who make those goods and services.

- *Chapter 8 identifies the laws of supply and demand. The decision of a restaurant owner to change the cost of a breakfast meal and the effect that would have on the business' income is discussed and illustrated as an example.*
- *Chapter 10 explores issues associated with the labor movement. The effects of the laws of supply and demand on the labor market is discussed and links to related articles are provided for examples.*

5. Two methods for classifying how income is distributed in a nation the personal distribution of income and the functional distribution reflect, respectively, the distribution of income among different groups of households and the distribution of income among different businesses and occupations in the economy.

- *Chapter 18 examines how income is distributed among different groups and occupations. Disparities in the system are identified and links to Web sites provide current statistics on income distribution in the United States.*

Content Standard 14—Entrepreneurs are people who take the risks of organizing productive resources to make goods and services. Profit is an important incentive that leads entrepreneurs to accept the risks of business failure.

Benchmarks Grade 12

1. Entrepreneurial decisions affect job opportunities for other workers.

- *Chapter 7 identifies the role of the entrepreneur in business. The law of diminishing returns is discussed as it affects the factors of production, including labor. A graphic is provided to better illustrate the concept.*

- *Chapter 10 examines issues related to labor, including the effects of management decisions on labor. Web links to major labor organizations, such as the Teamsters and the AFL-CIO, are provided for further research.*

2. Entrepreneurial decisions are influenced by government tax and regulatory policies.

- *Chapter 10 explores issues related to the labor movement. The influence of government regulations on businesses and labor organizations are discussed and Web links to the complete texts of influential government legislation, such as the Norris-LaGuardia Act and the Taft-Hartley Act, are provided for further exploration.*

- *Chapter 12 examines the roles government play in monitoring business practices and offers Web links to important governmental regulatory agencies such as the Environmental Protection Organization and the Equal Employment Opportunity Commission.*

- *Chapter 13 identifies issues related to government taxation and its effects on individuals and businesses. Links to related articles and Web sites are provided to highlight current issues.*

Content Standard 15—Investment in factories, machinery, new technology, and in the health, education, and training of people can raise future standards of living.

Benchmarks Grade 12

1. Economic growth is a sustained rise in a nation's production of goods and services. It results from investments in human and physical capital, research and development, and technological change, and from improved institutional arrangements and incentives.

- *Chapter 15 examines how the economy grows. The concept of “real GDP” is defined. The factors that have led to the growth of the U.S. economy since 1929 are discussed and links to related articles and Web sites are provided for further reference.*

2. Historically, economic growth has been the primary vehicle for alleviating poverty and raising standards of living.

- *Chapter 15 explains how economic growth has helped to alleviate poverty and raise the standard of living. Links to related articles and Web sites are cited to provide more information on this topic.*

3. Economic growth creates new employment and profit opportunities in some industries, but growth reduces opportunities in others.

- Chapter 10 explores labor issues and explains how the change in focus of the U.S. economy, from one that produces goods to one that provides services and information, has affected the labor market. Links to Web sites that provide current statistics and training opportunities for growing occupations are provided.

4. Investments in physical and/or human capital can increase productivity, but such investments entail opportunity costs and economic risks.

- Chapter 7 identifies risks associated with business investments. The law of diminishing returns is defined and the effects it has on the factors of production are discussed. Graphics are provided to better illustrate this concept.

5. Investing in new physical or human capital involves a trade-off of lower current consumption in anticipation of greater future production and consumption.

- Chapter 7 defines the laws of diminishing returns and the effect of adding extra factors of production to a task. Graphics are provided to better illustrate this concept.
- Chapter 15 defines the concept of the accelerator effect, which explains how an increase in demand for a product requires a corporation to invest more in physical and human capital.

6. Higher interest rates discourage investment.

- Chapter 17 examines the effects that changes in interest rates have on consumers, businesses and the economy as a whole. Links to related Web sites and articles provide current information on interest rates.

7. The rate of productivity increase in an economy is strongly affected by the incentives that reward successful innovation and investments (in research and development, and in physical and human capital).

- Chapter 3 highlights the incentives available in a capitalist system and compares those to incentives in a socialist and communist system. Web links to biographies of influential philosophers such as Adam Smith and Karl Marx are provided along with the complete texts of their most influential works.

- *Chapter 15 identifies incentives the government offers, such as exclusive patent rights, to promote innovation that is vital to stimulate the growing economy. A Web link to the U.S. Patent and Trademark Office is provided for further research.*

Content Standard 16—There is an economic role for government in a market economy whenever the benefits of a government policy outweigh its costs. Governments often provide for national defense, address environmental concerns, define and protect property rights, and attempt to make markets more competitive. Most government policies also redistribute income.

Benchmarks Grade 12

1. Markets do not allocate resources effectively if: (1) property rights are not clearly defined or enforced, (2) externalities (spillover effects) affecting large numbers of people are associated with the production or consumption of a product; or (3) markets are not competitive.

- *Chapter 1 identifies the role of government to perform tasks that the private sector is unable or unwilling to perform.*
- *Chapter 3 provides a comparison of capitalism, socialism and communism and identifies the difference in property rights and competition among the three. Web links to biographies of influential philosophers such as Adam Smith and Karl Marx are provided along with the complete texts of their most famous works.*
- *Chapter 12 identifies the many roles of government and Web links to important governmental agencies are provided to demonstrate this point.*

2. An important role for government in the economy is to define, establish, and enforce property rights. A property right to a good or service includes the right to exclude others from using the good or service and the right to transfer the ownership or use of the resource to others.

- *Chapter 3 identifies property rights as one of the important differences between a capitalist and communist economy. Web links to biographies of influential philosophers such as Adam Smith and Karl Marx are provided along with the complete texts of their most famous works.*

3. Property rights provide incentives for the owners of resources to weigh the value of present uses against the value of conserving the resources for future use.

- Chapter 3 identifies property rights as one of the important differences between a capitalist and communist economy. Web links to biographies of influential philosophers such as Adam Smith and Karl Marx are provided along with the complete texts of their most famous works.

4. Externalities exist when some of the costs and benefits associated with production and consumption fall on someone other than the producers or consumers of the product.

- Chapter 3 explains how in a socialist or communist system some of the costs and benefits of production fall on the government and not the producer or consumer. Web links to biographies of influential philosophers such as Adam Smith and Karl Marx are provided along with the complete texts of their most famous works.

5. When a price fails to reflect all the benefits of a product, too little of the product is produced and consumed. When a price fails to reflect all the costs of a product, too much of it is produced and consumed. Government can use subsidies to help correct for insufficient output; it can use taxes to help correct for excessive output; or it can regulate output directly to correct for over- or under-production or consumption of a product.

- Chapter 1 identifies the role of government to perform tasks that the private sector is unable or unwilling to perform. Chapter 8 describes how the laws of supply and demand determine the price of a product. The cost of tomatoes is cited as an example and graphics are provided to help illustrate this concept.

- Chapter 12 identifies the role of government in maintaining economic stability. Web links to many governmental agencies are provided for further research.

- Chapter 13 explores the governmental role of taxation and defines its uses to regulate economic activities. Links to related articles and Web sites are provided for further research.

- Chapter 20 provides an overview of government subsidies and explains their purpose in the economic system. Web links to governmental agencies that provide services such as Social Security, Medicare and Medicaid are included for further research.

- Chapter 21 examines how federal subsidies are used to help American farms maintain a competitive edge in the global economy. Links to the complete texts of influential legislation such as the Freedom to Farm Act and the Farm Bill of 2002 are provided.

6. When one producer can supply total output in a market at a cost that is lower than when two or more producers divide production, competition may be impossible. In the absence of competition, government regulations may then be used to try to control price, output, and quality.

- Chapter 9 discusses the impact of monopolies and oligopolies on the free market system. The effects of government regulations are discussed and links to the complete texts of influential antitrust laws, such as the Sherman Antitrust Act and the Robinson-Patman Act are provided.

7. Governments often redistribute income directly when individuals or interest groups are not satisfied with the income distribution resulting from markets; governments also redistribute income indirectly as side-effects of other government actions that affect prices or output levels for various goods and services.

- Chapter 20 describes how governments redistribute income through federal subsidies such as Social Security, Medicare and Medicaid. A history of federal subsidies is provided as are Web links to important governmental agencies such as the Social Security Administration.

8. Governments provide an alternative method to markets for supplying goods and services when it appears that the benefits to society of doing so outweigh the costs to society. Not all individuals will bear the same costs or share the same benefits of those policies.

- Chapter 1 identifies the role of government to perform tasks that the private sector is unable or unwilling to perform.
- Chapter 12 examines the role of government in the economic system. The concept of cost/benefit ratio is explored and the debate that is involved in creating the budget for the national government is discussed. Web links to influential government agencies such as the Office of Management and Budget and the Congressional Budget Office are available for current information on budgetary decisions.
- Chapter 13 explains how taxes are used to pay for governmental programs. The fairness of different taxation methods are discussed and links to related articles and Web sites are available for further research.

9. A government policy to correct a market imperfection is not justified economically if the cost of implementing it exceeds its expected net benefits.

- *Chapter 12 examines the role of government in the economic system. The concept of cost/benefit ratio is explored and the debate that is involved in creating the budget for the national government is discussed. Web links to influential government agencies such as the Office of Management and Budget and the Congressional Budget Office are available for current information on budgetary decisions.*
- *Chapter 15 defines the concept of cost/benefit analysis which policy makers use to determine which policies to implement.*

Content Standard 17—Costs of government policies sometimes exceed benefits. This may occur because of incentives facing voters, government officials, and government employees, because of actions by special interest groups that can impose costs on the general public, or because social goals other than economic efficiency are being pursued.

Benchmarks Grade 12

1. Citizens, government employees, and elected officials do not always directly bear the costs of their political decisions. This often leads to policies whose costs outweigh their benefits for society.

- *Chapter 12 examines the role of government and elected officials in an economic system. The concept of cost/benefit ratio is defined in the context of the budget-making process. Web links to key governmental agencies, such as the Office of Management and Budget and the Congressional Budget Office, are provided.*

2. Incentives exist for political leaders to implement policies that disperse costs widely over large groups of people and benefit small, and politically powerful groups of people.

- *Chapter 13 identifies issues related to taxation and the concept of a "fair tax" is discussed. Links to Web sites to the Internal Revenue Service and Web sites for organizations that advocate tax reform are provided for comparative analysis.*
- *Chapter 20 discusses federal subsidies. The history of federal subsidies in America is presented and Web links are provided for important governmental agencies that oversee the disbursement of federal subsidies, such as Social Security, Medicare and Medicaid.*

3. Incentives exist for political leaders to favor programs that entail immediate benefits and deferred costs; few incentives favor programs promising immediate costs and deferred benefits, even though the latter programs are sometimes economically more effective than the former programs.

- *Chapter 13 identifies issues related to taxation and the concept of a "fair tax" is discussed. Links to Web sites to the Internal Revenue Service and Web sites for organizations that advocate tax reform are provided for comparative analysis.*
- *Chapter 16 provides an overview of the Great Depression and the government's response. Oral histories are presented from individuals that lived through those turbulent times.*
- *Chapter 20 discusses federal subsidies. The history of federal subsidies in America is presented and Web links are provided for important governmental agencies that oversee the disbursement of federal subsidies, such as Social Security, Medicare and Medicaid.*

4. Although barriers to international trade usually impose more costs than benefits, they are often advocated by people and groups who expect to gain substantially from them. Because the costs of these barriers are typically spread over a large number of people who each pay only a little and may not recognize the cost, policies supporting trade barriers are often adopted through the political process.

--Chapter 22 explores the many issues associated with foreign trade. The debate over protectionism vs. free trade is highlighted and links to Web sites to international trade organizations such as the North American Free Trade Agreement and the Asia Pacific Economic Cooperation are provided.

5. Price controls are often advocated by special interest groups. Price controls reduce the quantity of goods and services produced, thus depriving consumers of some goods and services whose value would exceed their cost.

- *Chapter 21 explains how price controls are used to protect American farmers. Important government legislation is discussed and links are available to the complete texts of the Freedom to Farm Act and the 2002 Farm Bill.*
- *Chapter 22 identifies many protective barriers that governments impose on foreign trade including price controls. Web links to international organizations such as the World Trade Organization and the International Monetary Fund are provided.*

Content Standard 18—A nation's overall levels of income, employment, and prices are determined by the interaction of spending and production decisions made by all households, firms, government agencies, and others in the economy.

Benchmarks Grade 12

1. Nominal GDP is measured in current dollars; thus, an increase in GDP may reflect not only increases in the production of goods and services, but also increases in prices. GDP adjusted for price changes is called "real GDP." Real GDP per capita is a measure that permits comparisons of material living standards over time and among different nations.

- *Chapter 14 defines the concept of gross domestic product (GDP). Other quality of life indexes such as the United Nations' Human Development Report are compared to GDP. A Web link is provided that presents the most current GDP figures for the United States. A link to the most current Human Development Report is also available for comparative purposes.*
- *Chapter 15 differentiates nominal GDP from real GDP. Links to related Web sites and articles are available for further research.*

2. The potential level of real GDP for a nation is determined by the quantity and quality of its natural resources, the size and skills of its labor force, and the size and quality of its stock of capital resources.

- *Chapter 14 explains how the GDP is calculated and a link to the Bureau of Economic Analysis is provided for more current information.*
- *Chapter 15 describes how the vast quantity and quality of natural resources, capital and labor have helped the U.S. economy, and in turn its GDP, grow. Web links are available that present current information on U.S. natural resources, labor and capital.*

3. One person's spending is other people's income. Consequently, an initial change in spending (consumption, investment, government, or net exports) usually results in a larger change in national levels of income, spending, and output.

- *Chapter 14 identifies the importance of flow to an economic system. National income measurements are also discussed and a Web link to statistics on national income from the Bureau of Economic Analysis is available. Graphics are used to better illustrate these concepts.*

4. When desired expenditures for consumption, investment, government spending, and net exports are greater than the value of a nation's output of final goods and services, GDP rises, and inflation occurs and/or employment rises.

- *Chapter 14 explains how the GDP is calculated and a link is provided to the Web page of the Bureau of Economic Analysis for current GDP statistics. Graphics are used to better illustrate these concepts.*
- *Chapter 16 describes how inflation and recession impact the economy and GDP. The phases of the business cycle are defined and links to related articles and Web sites are provided.*

5. When desired expenditures for consumption, investment, government spending, and net exports are less than the value of a nation's output of final goods and services, GDP decreases and inflation and/or employment decreases.

- *Chapter 14 explains how the GDP is calculated and a link is provided to the Web page of the Bureau of Economic Analysis for current GDP statistics. Graphics are used to better illustrate these concepts.*
- *Chapter 16 describes how inflation and recession impact the economy and GDP. The phases of the business cycle are defined and links to related articles and Web sites are provided.*

Content Standard 19—Unemployment imposes costs on individuals and nations. Unexpected inflation imposes costs on many people and benefits some others because it arbitrarily redistributes purchasing power. Inflation can reduce the rate of growth of national living standards because individuals and organizations use resources to protect themselves against the uncertainty of future prices.

Benchmarks Grade 12

1. The unemployment rate is the percentage of the labor force that is willing and able to work, does not currently have a job, and is actively looking for work.

- *Chapter 19 defines the term unemployment rate and discusses issues associated with unemployment. Web links to current statistics on employment trends in the United States are provided.*

2. The unemployment rate is an imperfect measure of unemployment because it does not: (1) include workers whose job prospects are so poor that they are discouraged from seeking jobs, (2) reflect part-time workers who are looking for full-time work.

- Chapter 19 discusses issues associated with unemployment and differentiates between—unemployed workers, underemployed workers and discouraged workers. Definitions of each are provided.

3. Unemployment rates differ for people of different ages, races, and sexes. This reflects differences in work experience, education, training, and skills, as well as discrimination.

- Chapter 19 identifies disparities in the work force among different ages, races and sexes. Graphics highlight how unemployment affects minorities and women. Web links are provided that highlight current trends in unemployment.

4. Unemployment can be caused by people changing jobs, by seasonal fluctuations in demand, by changes in the skills needed by employers, or by cyclical fluctuations in the level of national spending.

- Chapter 19 explores the causes of unemployment and solutions to unemployment are discussed. Links to related articles and Web sites are provided for further study.

5. Full employment means that the only unemployed people in the economy are those who are changing jobs.

- Chapter 19 explains what full employment is and suggestions for attaining full employment in the U.S. are mentioned. Links to related articles and Web sites are available for more research.

6. The consumer price index (CPI) is the most commonly used measure of price-level changes. It can be used to compare the price level in one year with price levels in earlier or later periods.

- Chapter 5 profiles the consumer price index (CPI) as an indicator of the cost of living. Comparisons to the cost of living in previous years are provided and a link to current CPI statistics is available.

7. Expectations of inflation may lead to higher interest rates.

- Chapter 6 explains how inflation may lead to higher interest rates. Concepts on how to maintain good credit are discussed and links to related articles and Web sites are provided.
- Chapter 16 examines the impact of inflation on the economy. Links to related articles and Web sites are available for further research.

8. The costs of inflation are different for different groups of people. Unexpected inflation hurts savers and people on fixed incomes; it helps people who have borrowed money at a fixed rate of interest.

- *Chapter 6 explains how inflation affects savers and borrowers differently. Related articles and Web sites are provided.*
- *Chapter 15 illustrates how inflation impacts the real interest rate and how that benefits the borrower at the cost of the lender.*

9. Inflation imposes costs on people beyond its effects on wealth distribution because people devote resources to protect themselves from expected inflation.

- *Chapter 6 explores consumer credit and concepts such as how to maintain good credit and the impact of inflation on consumers. Links to related articles and Web sites are provided for examples.*

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

Benchmarks Grade 12

1. Fiscal policies are decisions to change spending and tax levels by the federal government. These decisions are adopted to influence national levels of output, employment, and prices.

- *Chapter 17 examines issues associated with stabilizing the economy. Fiscal policy is defined and differentiated from monetary policy. Links to Web sites and articles on current fiscal policies are provided.*

2. In the short run, increasing federal spending and/or reducing taxes can promote more employment and output, but these policies also put upward pressure on the price level and interest rates. Decreased federal spending and/or increased taxes tend to lower price levels and interest rates, but they reduce employment and output levels in the short run.

- *Chapter 17 explores the benefits and drawbacks to increasing federal spending and/or reducing taxes as a way to stabilize the economy. Related articles are provided to highlight fiscal decisions by the current presidential administration.*

3. In the long run, the interest-rate effects of fiscal policies lead to changes in private investment spending by businesses and individuals that partially, if not entirely, offset the output and employment effects of fiscal policy.

- Chapter 17 identifies how interest rates, consumer spending and business spending are affected by fiscal policy. Related articles are provided to highlight fiscal decisions by the current presidential administration.

4. The federal government's annual budget is balanced when its revenues from taxes and user fees equal its expenditures. The government runs a budget deficit when its expenditures exceed its revenues. The government runs a surplus when its revenues exceed its expenditures.

- Chapter 12 describes the budget-making process of the federal government. Web links to influential governmental agencies such as the Office of Management and Budget and the Congressional Budget Office are provided for current information on the federal budget.
- Chapter 17 identifies the options available to the government in stabilizing the economy. The concept of deficit financing is discussed and the debate between supply-side and Keynesian economists is highlighted. Related articles provide examples of fiscal decisions made by the current presidential administration.

5. When the government runs a budget deficit, it must borrow from individuals, corporations, or financial institutions to finance that deficit.

- Chapter 17 defines the concept of deficit financing and the options the administration has in stabilizing the economy. Related articles and Web sites are provided to profile decisions on stabilizing the economy by the current administration.

6. The national debt is the total amount of money the federal government owes. This is the accumulated sum of its annual deficits and surpluses. The government pays interest on the money it borrows to finance the national debt.

- Chapter 6 explores the impact of the national debt on the consumer. Related articles are available to identify current issues related to the national debt.
- Chapter 12 highlights ways the government attempts to balance the national budget using cost/benefit ratios. Government waste is discussed and Web links are provided to watchdog organizations that monitor government spending and identify government waste.

- Chapter 17 examines the impact of debt on the national government and the economy as a whole. The concept of deficit financing is discussed along with the debate between supply-side and Keynesian economists.

7. In the long-run, inflation results from increases in a nation's money supply that exceed increases in its output of goods and services.

- Chapter 16 identifies the causes of inflation and its impact on the national economy. The phases of the business cycle are described and graphics are provided to better illustrate the concept.
- Chapter 17 describes how monetary policy is used to adjust for inflation. Related articles and Web sites are provided for further research.

8. Monetary policies are decisions by the Federal Reserve System that lead to changes in the supply of money and the availability of credit. Changes in the money supply can influence overall levels of spending, employment, and prices in the economy by inducing changes in interest rates charged for credit, and by affecting the levels of personal and business investment spending.

- Chapter 11 explains how the Federal Reserve System works to maintain the supply of money and available credit. Web links to all 12 Federal Reserve Banks are provided for current information on the Federal Reserve System.
- Chapter 17 defines monetary policy and differentiates it from fiscal policy. The role of the Federal Reserve is described and Web links to the Federal Reserve System are provided for current information on the Federal Reserve and monetary policy.

9. The major monetary policy tool that the Federal Reserve System uses is open market purchases or sales of government securities. Other policy tools used by the Federal Reserve System include increasing or decreasing the discount rate charged on loans it makes to commercial banks and raising or lowering reserve requirements for commercial banks.

- Chapter 11 identifies the role of the Federal Reserve System in maintaining a stable supply of money and credit. Web links to the Federal Reserve Banks, the Board of Governors and other segments of the Federal Reserve System are provided.
- Chapter 17 describes the monetary policy tools available to the Federal Reserve including making changes to the discount rate and selling or purchasing government securities. A link to the Federal Open Market Committee is provided for current information on monetary policy actions.