UNDERSTANDING THE ECONOMICS STANDARDS

Economics studies how people, acting as individuals or in groups, decide to use scarce resources to satisfy wants. This fundamental economic concept of scarcity is at the core of the discipline. There are never enough natural resources, human resources, or capital resources (man-made goods such as tools, equipment, machinery, factories) to produce everything society wants. Therefore, choices must be made on what to produce, how to produce, and for whom to produce. Choices must also be made at a personal level. There never seems to be enough money or time to have or to do everything one wants.

Economics is a way of thinking, a science of making choices. Economists examine the decision-making processes of individuals, businesses, markets, governments, and economies as a whole. An understanding of economic principles helps people to consider not only the short-term effects of a decision, but also its long-term effects and possible unintended consequences; to see the connections between personal self-interest and societal goals; to understand how individual and social choices are made in the context of an economy; and to analyze the impact of public policies and events upon such social goals as freedom, efficiency, and equity.

Because of increasing interdependence and globalization, everyone in the United States needs to be aware of the issues in the global economy, their role in that system, and be able to respond to changes so that they can effectively maintain or raise their standard of living.

Goal Statements for the Economics Standards:

- Students will learn to examine the inherent relationship between costs and benefits, and the values associated with them.
- Students will understand economic principles, whole economies, and the interactions between different types of economies to comprehend the movement and exchange of information, capital, and products across the globe.
- Students will be able to assess the impact of market influences and governmental actions on the economy in which they live.
- Students will make personal economic choices and participate responsibly and effectively in social decision-making as citizens in an increasingly competitive and interdependent global economy.

ECONOMICS STANDARD ONE: Students will analyze the potential costs and benefits of personal economic choices in a market economy [Microeconomics].

Enduring Understandings

Students will understand that:

- Due to scarcity, individuals, families, communities, and societies as a whole, must make choices in their activities and consumption of goods and services.
- Goods, services, and resources in a market economy are allocated based on the choices of consumers and producers.

- Effective decision making requires comparing the additional costs of alternatives relative to the additional benefits received.

How societies survive physically with a limited set of resources is the foundation for the discipline of economics. Because there are not enough resources to satisfy people's wants, decisions have to be made regarding how resources are going to be used and distributed. By learning to analyze how these decisions are made, students have greater knowledge that will allow them to use their own and society's resources to achieve the efficient use of resources and the maximizing of benefits relative to costs.

When economists refer to cost/benefit analysis, they mean comparing what one gains and what one gives up when making a choice. The term that describes this process is trade-off. What is given up is an opportunity cost. Gains and losses are not only monetary, but also have psychological components based on what individuals and societies value. Every person beginning early in life has to make decisions related to how to spend time, income, and energy. When people choose one activity rather than another, the next best thing they could have done with these resources is called the opportunity cost.

On a societal level, productive resources available are land, labor, and capital. Understanding that scarcity requires that choices be made and that for every choice there are costs means that people and society can be more deliberate about what to produce, how to produce the good or service, and for whom to produce. An economy requires everyone in a society to engage in activities that involve the marshalling of productive resources, the organizing of work, the generating of income, and the allocating and distributing of goods and services. In the United States mixed market economy these questions are answered through the interaction of consumers, producers, and government. Prices send signals and provide incentives that influence the decisions of both consumers and producers.

<u>Economics Standard One K-3a</u>: Students will understand that individuals and families with limited resources undertake a wide variety of activities to satisfy their wants.

Essential Question:

- Why can't I have everything I want?

In today's society, people have a wide variety of **economic wants**. These are wants that can be satisfied by consumption of a **good** or **service**. Some wants are individual, whereas others, such as a family's desire for a home or a club's desire for a recreation center, are group wants. Many economic wants are **private**, such as food, clothing, shelter, medical care, entertainment, and even leisure time, but others are **public** such as society's wants for highways, education and national defense and are paid for with tax dollars. One fact that emerges when analyzing wants is that people's wants for goods and services exceed society's capacity to produce them. This problem is called **scarcity**.

Scarcity necessitates choice. If we can't have everything we would like, we must choose those things we want most. Thus, both as consumers and producers, both as families, groups, and societies must continuously make choices about how to use the scarce productive resources available to them to satisfy their wants.

Productive resources consist of what is required to produce the goods and services people want. Productive resources fall into three basic categories: human resources, natural resources, and capital resources (sometimes referred to as capital goods).

- **Human resources** are the health, strength, education, and skills of people. The number of people available for work and the hours they work constitute only one dimension of human resources. Another dimension is the level of ability of people and their motivation. The quality of human resources reflect the skills, knowledge, and motivation gained through education and training.

- **Natural resources** are gifts of nature that are used to produce goods and services. Some examples are land, trees, fish, oil and mineral deposits, soil, and climatic conditions.

- **Capital goods** or resources are the man-made goods used to produce goods and services. They include such things as buildings, equipment, machinery, ports, roads, dams, and tools.

In order to satisfy wants, individuals undertake a wide variety of activities. Individuals and families sell their productive resources. For grades K-3, this means selling one's labor. In return for selling one's labor, workers receive an **income**. Individual consumers and families must decide after paying **taxes** how much of their income to **spend** and to **save**.

Producers, too, must make choices on how to use the productive resources they buy. There are never enough human, natural, and capital resources to produce everything they would like to produce. For example, a producer might have resources to produce either paper party hats or paper name tents. Due to scarcity, the producer must make a choice as to which product he will produce.

<u>Economics Standard One K-3b</u>: Students will apply the concept that economic choices require the balancing of costs incurred with benefits received.

Essential Questions:
- Is what I want worth the cost?
- How do I make informed choices?

Some students believe they can have all the goods and services they want from their families or from the government because they think goods provided by families and governments are free. But this view is mistaken. Nothing is free. Resources have alternatives uses, even if parents or governments own them. If we use our limited resources for one purpose, we must give up the opportunity to use these same resources for other purposes. Thus, the term **opportunity cost** refers to the next best thing for which the resources could be used. If, for example, a piece of land could be used for an office building, a sports stadium, a department store, or a parking garage, the opportunity cost of using the land for a department store is only the loss of the next best alternative. It is the loss of the office building or of the sports stadium or of the parking garage but not all three.

To make decisions that provide the greatest possible return from the resources available, individuals, families, and groups must analyze the **benefits and costs** of using their resources to do a little more of some things and a little less of others. For example, to use their time effectively, students should weigh the additional benefits and costs of spending another hour studying rather than talking with friends. Analyzing issues by identifying the costs and benefits will help students make effective decisions in their adult roles as consumers, producers, savers, investors, and citizens.

<u>Economics Standard One 4-5a</u>: Students will understand that prices in a market economy are determined by the interaction of supply and demand, with governments intervening to deal with market failures.

<u>Economics Standard One 4-5b</u>: Students will understand that consumers and producers make economic choices based on supply, demand, access to markets, and the actions of government.

Essential Questions:

- Why might prices change? Who decides?
- How do I know what and when to buy or sell? Does price *always* matter?
- To what extent should government become involved in markets?

The benchmarks in the 4-5 grade cluster are closely linked. Students learn that all decisions in market economies are established by interaction between buyers and sellers. There is no central planning agency that decides how many different kinds of sandwiches are provided for lunch every day at restaurants and stores, how many loaves of bread are baked, how many toys are produced before the holidays, or what the prices will be for these goods. Understanding how market prices and output levels are determined and how prices act as signals and incentives helps people anticipate market opportunities and make better choices as consumers (buyers) and producers (suppliers). The forces of supply and demand work best in competitive markets with an unlimited number of sellers and buyers, each with reasonably accurate information, who are competing to sell or buy a relatively similar product such as tomatoes, wheat, and apples.

Supply is defined as the different quantities of a resource, good, or service that producers are willing and able to offer for sale at various prices during a specific time period. Decisions by suppliers of how much to produce reflect the cost of producing the product. As price increases, the amount of products or services producers are willing and able to make also increases. Conversely, as price decreases, the amount producers are willing and able to make decreases.

Demand is defined as the different quantities of a resource, good, or service that consumers are willing and able to purchase at various prices during a specific time period. Decisions by consumers depend on their income, tastes and fads, number of buyers and the price of other goods. Generally, the lower the price of something, more of it will be purchased. The higher the price of something, less of it will be purchased.

The demand and supply schedule below shows the market equilibrium price for a half gallon of ice cream is $4.00 per unit. At any price below $4.00 per unit, the quantity demanded exceeds the quantity supplied and a shortage occurs. Competition among buyers will bid the price up to $4.00. At any price above $4.00 per unit, there will be a surplus. The quantity supplied exceeds the quantity consumers are willing to buy. At a price of $4.00, the amount producers are willing to supply equals the amount consumers are willing to buy. There is neither a shortage nor a surplus. This price is called the market equilibrium price or market clearing price.

Supply and Demand Schedule for a Half-Gallon of Ice Cream

Quantity Supplied by Producers (millions of units)	Price ($ per unit)	Quantity Demanded by Consumers (millions of units)
70	$7.00	10
60	6.00	20
50	5.00	30
40	4.00	40
30	3.00	50
20	2.00	60
10	1.00	70

The schedule also shows that 40 million units is the market equilibrium quantity for the market. At a quantity of 40 million units the price that sellers are willing to accept and the price that buyers are willing to pay are equal. The market equilibrium price of $4.00 and the market equilibrium quantity of 40 million units will persist so long as other factors remain unchanged. If there is a change in supply, or if there is a change in demand, there will be a change in the market equilibrium price and quantity.

An increase in supply, for example, means sellers are willing and able to sell larger quantities at each and every price. This would result in a lower market equilibrium price and a larger quantity exchanged, assuming demand does not change. A decrease in supply would have the opposite effect. Changes in supply can be due to a number of factors. For grades 4-5, the factors or determinants that cause a change in supply are change in the cost of production (natural, human and capital resources), the change in number of sellers in the market or government actions.

An increase in demand would mean that buyers are willing and able to buy larger quantities at each and every price. This would result in a higher market equilibrium price and larger quantity exchanged. A decrease in demand would have the opposite effect. Changes in demand can be attributed to a number of factors. For grades 4-5, the factors or determinants that cause a change in demand are changes in consumers' income, taste and fads, and a change in the number of consumers in a market.

In a perfect market, one important factor in selecting one good over another is price. This is called **price competition**. However, many **non-price competition** factors such as service and quality of products influence consumers' decisions. Restaurants that set prices too high, or give slow unfriendly service, risk losing customers to competing restaurants that offer lower prices, higher quality products, and better service. In this way, competition benefits consumers. Understanding the benefits of competition and the costs of limiting competition helps students evaluate public policies that affect the level of competition in various markets.

Markets work best when they are fundamentally competitive, when buyers and sellers have access to sufficient reliable information, and when market prices reflect the full costs and benefits related to producing and consuming goods and services. Market failures occur when there are significant deviations from these conditions. For grades 4-5, market failures include **inadequate competition**, **externalities**, and the desire for **public goods**.

In a market economy, there is disagreement on the role government should play. Most economists agree that government involvement is necessary to insure competition, protect property rights and provide public goods and services. However, when it comes to a specific issue, the amount of government involvement can create controversy. For example, should there be laws that prohibit child labor, regulate health and safety, provide farm price supports and control land use through zoning laws?

Economics Standard One 6-8a: Students will analyze how changes in technology, costs, and demand interact in competitive markets to determine or change the price of goods and services.

Essential Question:

- Under what market conditions does price change?

In a market economy, prices of **goods and services** along with quantities demanded and produced continually change. Changes in supply and demand occur because of many factors. Understanding the market forces and situations that cause supply and/or demand to change is essential to understanding how prices are determined.

Numerous factors cause supply to change. Advances in technology lower production costs and increases supply. For example, robots replacing workers on assembly lines will reduce a manufacturer's labor costs, causing prices of goods and services to decrease. Another factor that affects supply is a change in the costs and availability of **productive**

resources, caused, for example, by such unexpected or natural events as drought, flood, war, and labor strikes. An increase in costs results in a decrease in available supply. Suppliers are willing and able to supply less at every price. A decrease in productive resources costs results in an increase in supply. Suppliers are willing and able to supply more at every price. Taxes such as sales and excise taxes also affect supply. An increase in taxes results in a decrease in supply, while s**ubsidies** will cause supply to increase. Another factor that affects supply is the number of sellers.

Changes in demand can be attributed to a number of factors. For grades 6-8, the factors or determinants include those from prior grades and changes in the price and availability of **substitute and complementary goods**. An increase in the market equilibrium price of a good will cause an increase in the demand for its substitute. A decrease in the market equilibrium price of a good will cause a decrease in the demand for its substitute. For example, consider the substitute goods chicken and fish. If the price of chicken increases and the price of fish stay the same, the demand for fish will increase. If the price of chicken decreases and the price of fish stay the same, the demand for fish will decrease. Complementary goods interact differently. For example, if the price of DVD players increases, the demand for DVDs will decrease. If the price of DVD players decreases, the demand for DVDs will increase.

Students can easily relate to this benchmark by discussion, evaluation, or demonstration of headlines in the news. For example, a headline such as "Oil Prices Continue to Rise" can lead to discussion of the effect upon the automobile market (complement good), the effect upon searching for new sources of oil (productive resources), the effect upon alternative fuels (substitute good), and the effect upon taxes collected from oil/gasoline sales (taxes).

By the end of 8th grade, students should be able to **graph supply and demand** curves from **supply and demand schedules** and predict how the curves will shift when any of the determinants or forces change and the impact that will have on equilibrium price and quantity.

<u>Economics Standard One 9-12a</u>: Students will demonstrate how individual economic choices are made within the context of a market economy in which markets influence the production and distribution of goods and services.

Essential Questions:

- To what extent does economic self-interest (individual consumers and producers) contribute to the greater good?
- Does competition ensure efficiency?
- To what extent do government policies affect markets?
- How might markets create incentives that impact decisions of individual consumers, producers, and government?

Individuals, businesses, and government must make choices in their activities when consuming and producing goods and services because the resources available to satisfy wants are limited. The availability of these resources, their quality, and their quantity impacts consumer demand, technology, costs, and government involvement. Where prices act as the rationing device for answering the question "who gets the goods and services," the freedom of individual consumers and producers to decide how best to use their resources and for what purposes drives the economy. Costs and benefits are associated with these choices. Acting in their own best interests, the interaction of the consumers and producers, represented by demand and supply, drives markets towards efficiency (equilibrium). Efficiency is getting the most out of one's resources at the least cost. In this manner, resources are allocated to their most highly valued use. When resources are under allocated or over allocated to producing a good or service, shortages and surpluses exist and those conditions are signals for price changes that seek to establish equilibrium.

The dynamics of the market assume that competition is perfect with an unlimited number of buyers and sellers, costless entry and exit, a standardized product, perfect knowledge of price, and perfect economic decisions. If any or many of these conditions do not exist, efficiency will be harder to achieve and there will be under or over allocation of resources to the production and consumption of the good or service. The closest products to perfect competition are agricultural goods like corn, wheat, or other grains. At the other extreme is a market where only one firm makes the good and there are significant costs to starting a rival business. Electric companies in a specific location fall into this category. The results of a monopoly are less production of the good and higher prices.

Factors that determine demand for specific goods and services are tastes and fads, income, price and availability of substitutes and complements, number of buyers, and future price expectations. Price changes determine the quantity consumers are willing and able to purchase of a specific good at a specific time. When prices rise, people buy less. If prices fall, they buy more. From the producers' perspective, factors that determine how much they will supply to the market include price and availability of land, labor, and capital, number of sellers, technology, price of other goods that they could produce, and tax policy. As in demand, price changes determine the quantity that will be supplied for a specific good at a specific time. When prices rise, producers make more of the good. If prices fall, producers make less available.

In addition to consumers and producers, the other major player that influences market outcomes is the government. In the United States, all levels of government affect the economy. Embedded in the United States Constitution are powers that call for the government to promote the general welfare, provide public goods and services, tax, protect property rights, regulate interstate commerce, and provide a money system. In section 8, clause 18, known as the "elastic clause," Congress is charged to make all laws "necessary and proper" for executing all previous powers. This has led to laws that ensure competition, regulates businesses, redistributes income, and reduces market inefficiencies. All of these activities influence and impact markets and the economy as a whole. Anti-trust laws, copyright and patent guarantees, environmental protection, enforcing of contracts, and tax policy are just a few examples of the legal structure the government has placed on the economy in the United States. Decisions made with cost/benefit analysis leads to better use of resources.

ECONOMICS STANDARD TWO: Students will examine the interaction of individuals, families, communities, businesses, and governments in a market economy [Macroeconomics].

Enduring Understandings

Students will understand that:

- 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, and trading partners.
- Because of interdependence, decisions made by consumers, producers, and government impact a nation's standard of living.
- Market economies are dependent on the creation and use of money, and a monetary system to facilitate exchange.

Unlike the study of individual markets, the total economy is the sum of all markets in a society. Understanding involves the ability on the part of the students to analyze how changes in one market will impact others. In a market economy, there are three major players in the economy: households, businesses, and government. What the society produces generates income for households. Households sell their productive resources (land, labor, capital, and entrepreneurship) to businesses in exchange for income (rent, wages, interest, and profit). Household income is spent, taxed, or saved. The money spent for private goods and services returns to businesses, while the taxes paid to the government fund public goods and services. Savings is money households do not spend on goods and services. Most households place this income with financial intermediaries, banks and brokers. These financial institutions transfer the savings through businesses borrowing from banks, the buying and selling of corporate stocks and bonds, the funding of mortgages, and the buying of insurance. Businesses from small to large borrow to expand. This requires buying more productive resources from households, which in turn creates more household income. Additionally, goods and services are exported and imported by American households and businesses causing increases in consumption and production within the United States. Economists measure these activities by calculating the **gross domestic product** and then measure a nation's **standard of living** by computing **gross domestic product per capita**.

<u>Economics Standard Two K-3a</u>: Students will understand how barter, money, and other media are employed to facilitate the exchange of resources, goods, and services.

Essential Question:

- How might the use of money affect the economy?
- Why is what we use as money valuable?

Individuals, groups, regions, and countries often specialize in the production of particular **goods** and in the performance of particular **services**. This leads to the output of more goods or services than the **producers** themselves wish to consume. In such situations, producers exchange their surpluses for other goods and services produced by people located elsewhere. The respective traders are better off. The principle of **voluntary exchange** is based on the fact that both sides expect to gain from trade. If they did not, they would not trade.

The simplest form of exchange is **barter.** Barter is the direct exchange of goods and services without the use of money. For bartering to occur, there must be a double coincidence of wants. That is, a person who wants to trade something must find a trading partner who value each other's respective good or service. Students in this grade cluster may already do this at lunchtime. This means of exchanging goods and services is time consuming, greatly restricts economic activity, and limits specialization. The use of money solves these problems.

A wide variety of items has been used as money throughout history, and almost anything can serve as money so long as people are willing to accept it in exchange for goods and services. For example, tobacco, nails, farm goods, fish, salt, furs, and cows have served as commodity money. **Commodity money** is a medium of exchange which has value as a commodity or good aside from its value as money.

Today's American currency consists of Federal Reserve notes. It has value because of people's willingness to accept it in payment. Anything used as money must perform three functions:

1. Medium of Exchange — Money acts as a go-between to make it easier to buy things. Sellers agree to accept it in exchange for a good or service.
2. Unit of Account — Money serves as a way to measure and compare the values of goods and services in relation to one another. When comparing prices, individuals can determine if one good is a better buy than another. It also allows people to keep accurate financial records.
3. Store of Value — Money allows people to hold onto their money and have it maintain its value.

For anything to serve as a medium of exchange it must be durable, portable, divisible, stable in value, relatively scarce, and acceptable.

1. Durable — Money must be able to withstand the wear and tear of many people using it.
2. Portable — Money must be easy to carry.
3. Divisible — Money must be easily divided into small parts so people can purchase goods and services of any price.
4. Stable in Value — Money keeps its purchasing power over long periods of time.
5. Scarce — There is not as much available as people would want.
6. Acceptable — Whatever is used as money must be accepted as a medium of exchange.

The standard refers to other media that could be used to facilitate exchange. Today, other media would include such things as debit cards and ATM cards. At the K-3 level, other media could also include commodity money. Explaining how commodity money was used is more appropriate.

<u>Economics Standard Two 4-5a</u>: Students will understand the role of banks and other financial institutions in the economy.

Essential Question:

- To what extent are banks necessary for an economy?

The role of banks and other financial institutions in the economy is to transfer funds, directly or indirectly, from **savers** to **borrowers.** The money households do not spend is called savings. An economist uses saving and investing to describe what households do with money they do not spend on goods and services. Saving and investing are essential to long-run economic growth. Saving provides resources to businesses to be used as investment in **capital goods.** When **loans** are made to borrowers, it stimulates the nation's economy. The purchase of more capital goods increases a nation's production capacity for goods and services, increases the gross domestic product, and can ultimately increase the standard of living.

Starting or improving a business or purchasing or renovating a home requires large amounts of money (financial capital). Since most people don't have large amounts of savings to finance such ventures, money (financial capital) has to be borrowed from other sources. For example, if a business finds demand for its goods and/or services increases, it might borrow money to purchase capital goods to expand. This expansion might result in hiring more workers. This increases the overall level of income in the community. When home owners get a mortgage for the construction of a new house, more workers must be hired to build the houses. Their incomes are then used to purchase more goods and services. In addition to constructing the house, many homeowners will purchase additional goods and services such as furniture, appliances, landscaping, and curtains. All these purchases create additional jobs and income which is spent in the community. Students need to understand how a loan impacts economic activity in the community.

The transfer of funds between savers and borrowers is facilitated by **financial intermediaries** and **financial markets.** Financial intermediaries, like **banks, credit unions**, **brokerage firms** and **insurance companies** provide funds to borrowers. Small business owners might find raising financial capital very difficult. Similarly, a prospective homeowner usually finds the price of a home too large to pay all at once. The small business owner or prospective homeowner might then turn to a bank to fund their ventures.

Banks receive **deposits** from savers and provide loans to borrowers. Banks provide an incentive to savers by paying interest on the deposits, and then charging interest to borrowers. The difference between the two is the bank's profit. A bank is a business, like any other, seeking to maximize profit and minimize costs. Banks also facilitate exchange by providing access to money. Bank depositors can write checks or withdraw cash in order to purchase goods and services.

Financial markets, like the **bond market** and the **stock market**, directly transfer funds from investors to businesses. A corporation or government might issue a **bond** to raise financial capital. A government, for example, might use funds raised from the sale of bonds to build schools or highways. The government borrows money from its citizens by selling its promise to return the price of the bond plus interest after a set period of time.

Stock represents a piece of ownership in a **firm**. A firm might sell stock to raise financial capital by selling shares of ownership in the businesses. People buy stock in a firm to receive a share of the firm's profits (dividends). Stocks and bonds are traded in markets where **supply** and **demand** determines their price.

Mutual funds consist of stocks and/or bonds from many different firms owned in a **portfolio**. They are traded like stocks and bonds. Mutual funds are usually less risky because the funds own a wide variety of stocks and bonds. Instead of individuals investing all of their savings in only one or two stocks or bonds, which has high risk, they reduce their risk by purchasing shares in a mutual fund. A mutual fund takes the money of many small investors to purchase stocks and bonds from a wide variety of businesses and governments.

Economics Standard Two 6-8a: Students will analyze the role of money and banking in the economy, and the ways in which government taxes and spending affect the functioning of market economies.

Essential Questions:

- To what extent do banks create interdependence?
- Are taxes necessary? How should tax revenue be used?

Money in an economy facilitates trade and encourages specialization by reducing the costs of exchange. The more an economy specializes, the more efficient it becomes. With increased efficiency comes a higher standard of living and greater interdependence.

Banks, taxes, and spending by governments transfer income and financial resources from one entity to another. These actions often promote economic growth and redistribute income.

Banks transfer money from savers to borrowers. Households are willing to save their money because banks are willing to offer interest payments as an incentive. Borrowers decide that the benefits of borrowing outweigh the costs. The loans made by banks transfer savings to borrowers. These transactions increase the money supply. This in turn increases economic activity and promotes economic growth.

The goals of the Federal Reserve are to promote economic growth, full employment, and price stability. By controlling the money supply, the Federal Reserve encourages or discourages banks from making loans, which influences the level of economic activity. (How the Federal Reserve attains these goals is addressed in the next grade cluster.)

Taxes transfer money from individuals and businesses to the government. The government uses that revenue to provide public goods and services and support the purposes of government. Taxes that are levied can alter what people buy and affect production decisions because of their impact on costs in the production process.

Government spending transfers revenue to individuals and businesses and provides public goods and services. Public goods and services provide benefits to more than one person at the same time, and their use cannot be restricted only to those people who have paid to use. Students should be able to analyze how tax dollars are used to pay for public goods such as national defense, education, and roads and explain why these services would be underprovided in the private sector without government intervention. Governments sometimes use taxes to influence economic activity. Government policy can address environmental concerns, define and protect property rights, and attempt to make markets more competitive. Many government policies also redistribute income. Social welfare programs such a food stamps and Medicaid are examples of this. **Circular Flow Models** can help students to analyze the role of money, banking, taxes and government spending in a market economy.

<u>Economics Standard Two 9-12a</u>: Students will develop an understanding of how economies function as a whole, including the causes and effect of inflation, unemployment, business cycles, and monetary and fiscal policies.

Essential Questions:

- Why is our economy interdependent?
- How might government policy decisions affect the stability of the economy?

When either the consumption or production decisions are added up for a year, the information tracks the health of an economy. Economists have come to refer to these changes in economic activity over time as the **business cycle**. The length of the cycle varies and reflects the decisions consumers, producers, and governments make and the impact these decisions have on an economy. The Great Depression can be used in classrooms as the “ultimate business cycle” against which all others are compared.

There are four parts to any business cycle (using the Great Depression as an example):

- Peak — the highest point GDP achieves. (The economy hit its peak in October, 1929.)*
- Recession — the period during which GDP declines. There must be at least six consecutive months of decline in the GDP to be called a recession.
- Trough — the lowest point GDP hits before economic growth begins for the next phase. (The economy hit its lowest point in 1933.)*

- Expansion — an increase in GDP for a specific time period. Growth may increase slowly as in the 1930s or rapidly as in the 1990s.

*The peak and the trough can only be determined in retrospect after the recession or expansion has begun.

Within a business cycle, the economy will show symptoms of instability, fluctuating between periods of unemployment and inflation. For the most part, the unemployment rate rises during a recession and declines during an expansion. In the 1970s, the United States experienced almost a decade of a condition known as “stagflation” during which both unemployment and inflation occurred at the same time. Since then, the cycles have reflected normal patterns.

What causes unemployment to rise above the 5% rate that is considered full employment? What does it mean to be unemployed? How are unemployment figures calculated? To be unemployed, a person has to be willing to, able to, and looking for work, but not be able to find it. The Bureau of Labor Statistics calls 64,000 households a month and asks a series of questions to determine the unemployment rate. It is not related to the number of people collecting unemployment. Consequently, many economists believe that the rate is too low due to the methods used to collect information and the fact that there are discouraged workers who have given up looking for a job. Unemployment is categorized by observing five different causes:

A. **Cyclical unemployment** is a result of overall decreased demand for goods and services, causing a downturn/recession in the economy that is reflected in the business cycle.
B. **Structural unemployment** refers to people that do not have the skills to match the job openings that are available. Demand for the skills they have decline. Businesses trying to reduce costs eliminate jobs. Time is required for many workers to retrain and find new jobs.
C. **Frictional unemployment** refers to workers who are between jobs. Examples of this range from those who have just graduated from high school or college to someone whose spouse has been transferred and has not yet found a new job to someone who was unhappy in their previous job and quit before having another one lined up.
D. **Seasonal unemployment** is a result of demand for workers declining because of the type of job they have. For example, landscapers have to find alternatives during the winter months, or summer resorts close down in September and other jobs are not available there. Construction workers and farm labor have to contend with the weather as a factor in whether or not they are employed. Knowing that the weather will change and that the season comes around yearly cause workers in these fields to find other intermittent employment or to live off savings during the off season.
E. **Technological unemployment** refers to technological change and innovation creating new goods and services that can make skills obsolete. Some workers have difficulty responding to the changes their companies implement. For many,

retraining is necessary to find jobs that will allow them to maintain their standard of living. Some might choose not to retrain.

Unemployment reduces household income, which creates less demand for goods and services. More people may be laid off and there is another round of decreasing income to households. Less income creates less tax revenue, which may result in a lower level of public goods and services and the jobs related to their delivery.

During an expansionary phase of the business cycle, characterized by economic growth, the possibility of **inflation** exists. Defined as an increase in the overall level of prices, inflation affects consumers, producers, and government differently. When the inflation rate rises above 3 %, **real purchasing power** in the economy declines for many people. Two root causes of inflation are demand pull and cost push. In the first scenario, the economy is considered to be overheated and that “too much money is chasing too few goods.” What does this mean? Productive resources in an economy are being used to their fullest capacity and choices are made by markets as to how to use them, so there is upward pressure on prices to determine who will get the goods and services. Incomes are higher than the amount of goods and services available so prices rise. In the cost push scenario, the costs of productive resources rise, pushing up the cost of production. Producers cut back on the amount they can supply so prices for the **final goods and services** rise. A good example of this was the inflation of the 1970s caused by the rapid increase in oil prices. Not only did gasoline prices increase for consumers, but the cost of transporting goods rose quickly. Since oil is also the base for many other products like plastics, fibers, pharmaceuticals, etc., their cost increased. Consumers whose incomes did not keep pace with the price increases found their real purchasing power declining.

There are gainers and losers during an inflationary spiral. If one is a saver, the value of savings declines if the interest rate received does not stay ahead of the inflation rate. A person with a fixed income, such as a retiree or welfare recipient, loses purchasing power. A creditor loses because he is being paid back in dollars that will buy less than when he lent the money. On the other hand, a borrower gains because they have received the goods or services at the lower price and they pay back in dollars worth less. People whose income rises faster than the inflation rate gain, as do those whose assets increase in value faster than the inflation rate.

To combat the instability of inflation and recession, the Federal Reserve System (also known as “the Fed”) and the federal government use the tools of **monetary and fiscal policy**, respectively. The goals of the Federal Reserve System are to promote economic growth, full employment, and to achieve price stability. Since inflation is caused by having too much money in circulation, the Fed uses monetary policy to control and stabilize the money supply. Acting as “the banker’s bank,” the Fed increases or decreases the money supply by providing incentives for banks to make (or not make) loans to businesses and households.

The tools which the Fed uses to accomplish these goals include being able to set **reserve requirements**, the **discount rate**, and the **federal funds rate target**, and to conduct

open market operations. The reserve requirement is the percentage of deposits a bank must keep as cash in their vault or on deposit at the Fed. Rarely is the reserve requirement altered because the impact of changing the **money multiplier** would be too great. To encourage or discourage banks from lending, the Fed sets the discount rate, the interest rate banks must pay the Fed for short term borrowing at the discount window. The Fed also sets the target interest rate for federal funds, the interest that banks charge each other for short term borrowing. The most often used tool of monetary policy is open market operations, the buying and selling of **government securities** to increase or decrease the money supply.

If the economy is in recession, the Fed will take steps to increase the money supply by buying government securities, lowering the discount and/or federal funds rate, and possibly lowering the reserve requirements. Increasing the money supply provides the banks with more lending capability so that they can make more loans, increasing demand for goods and services. During inflationary times, there could be too much money in circulation, so the Fed decreases the amount of money by selling government securities, by increasing the discount and federal funds rate, or by increasing the reserve requirement.

While the Federal Reserve is responsible for monetary policy, the executive and legislative branches of the federal government utilize fiscal policy to combat the ups and downs of the business cycle. The two tools that the President and Congress can use are taxing and spending policies. When faced with a recession, the fiscal policy suggested by this condition is to reduce taxes, increasing household and business income which in turn increases households' ability to purchase goods and services. If done when the problem exists, this policy can encourage economic growth. If consumer and producer demand is still sluggish, the government can increase government spending by purchasing goods and services from businesses, which then need to hire additional productive resources including labor. When an inflationary spiral is affecting the economy, fiscal policy actions indicate that taxes should be increased and cuts should be made in government spending. The consequence of this policy is to decrease overall demand so that prices will stabilize.

ECONOMICS STANDARD THREE: Students will understand different types of economic systems and how they change [Economic Systems].

Enduring Understandings

Students will understand that:

- Because resources are scarce, societies must organize the production, distribution, and allocation of goods and services.
- The way societies make economic decisions depends on cultural values, availability and quality of resources, and the extent and use of technology.
- Changing economic systems impact standards of living.

Different economic systems -- **traditional, command, market, and mixed market** -- have evolved over time. Each of these systems has costs and benefits for its citizens.

Students will be more empowered when they comprehend how interdependent the world has become and what their role in the economy is.

Underlying the choices and decisions for every economy are the goals of **efficiency, equity, freedom, growth, security, and stability**. Understanding how a society uses its limited resources to achieve these goals involves understanding that trade-offs have to be made. For example, in the United States, political debates about universal health care, social security, and environmental issues revolve around how people value the economic goals. Economic analysis of these issues examines benefits received and costs incurred. Economists utilize dollars and cents to quantify trade-offs related to the use of productive resources. However, some goals, such as freedom and equity, are not easily quantified, yet have to be considered when making these decisions. Therefore, elected representatives choose based on what they or their constituencies value.

<u>Economics Standard Three K-3a</u>: Students will identify human wants and the various resources and strategies which have been used to satisfy them over time.

Essential Questions:

- How should people use what they have to get what they want?
- Why have different ways to produce and allocate goods and services developed?

As consumers and producers, people use resources in different ways to satisfy their wants. Due to scarcity, societies must choose how to produce and allocate resources, goods and services in order to satisfy their wants. To do this, individuals and societies must answer three basic economic questions: What goods and services will be produced? How will these goods and services be produced? Who will consume them?

There are essential differences in how different economic systems answer these three economic questions. In a traditional system, custom is used. Resources are used and goods and services are produced and consumed in much the same way things have been done for generations. Command economies tend to rely on a central authority to answer these questions, while a market system relies on the decisions of individual buyers and sellers.

How the question of what to produce is answered depends on the availability of productive **resources**. Societies tend to produce goods and services when the resources needed for production are readily available and accessible. Size and skills of the labor pool, quality and quantity of **natural resources** and **capital resources,** and access to technology determine how goods and services are produced. Areas with poor capital resources, limited **technology,** and large populations tend to rely heavily on **human resources** in the production process using limited or poor quality tools and equipment. Countries with skilled labor, access to natural resources, and high quality capital resources use less labor and more machines and technology in the production process. In reality, the mix of human, natural, and capital resources that societies use fall somewhere in between labor or capital intensive economies.

Due to scarcity, who gets the goods and services once they are produced requires some method of allocation. In traditional societies, this question is handled by custom. In a command economy, a central authority makes the decision usually by setting prices on goods and services, often below the market price which results in shortages. In a market system, this question is usually answered by price. A consumer's income determines what goods and services one can afford.

However, within any economic system, there are different ways to distribute goods and services. These include prices, command, majority rule, contests, force, first-come-first served, sharing equally, lottery, personal characteristics and others. No one method can satisfy all wants. Therefore, advantages and disadvantages of each method must be analyzed before one is selected. In the K-3 classroom, scarcity exists naturally. At this level, students can compare the advantages and disadvantages of different methods of allocating various goods and services such as treats, time on the classroom computer, use of classroom supplies, playground equipment, as well as goods and services that are scarce at home and in the community.

Economics Standard Three 4-5a: Students will identify different means of production, distribution, and exchange used within economic systems in different times and places.

Essential Question:

- How does getting what you want within an economic system depend on *where* and *when* you live?
- To what extent do economic systems differ and why?

An economy is an organized arrangement for producing goods and services to satisfy people's wants. In any economy, resources used to produce these goods and services are scarce. Therefore, choices must be made. This requires an economy to answer three economic questions — what goods and services to produce, how to produce them, and who will get them. In grades 4-5, this means students need to study how different types of economic systems answer these basic questions. The information presented in grades K-3 will be examined in more detail at grades 4-5 using the context of different times and places and different economic systems.

In Standard Three, emphasis is placed on production, distribution and exchange. Production refers to how goods and services are produced. Are goods hand-made by individual craftsman or are they made through division of labor or with the use of extensive technology? Distribution refers to allocation of goods and services. Once goods and services are produced, how is it decided for whom? Exchange refers to how goods and services are traded and paid for.

The three types of economic systems — **traditional, command, and market** — have different ways to answer the three economic questions. On the simplest level, traditional economies tend to do things the way they have always been done. Members of these societies tend to produce what they have always produced using the same methods as their ancestors and distribute or allocate the final products the way custom dictates. In command economies, central planners determine what and how much to produce based on politically determined goals. Central planners also determine the type and combination of resources used to produce the goods and services. In command economies the "for whom" question is answered by central planners who set wages, incomes, and prices for goods and services. Prices are usually set below the market price, creating shortages. In a market economy, consumer preferences, producer costs, and profit considerations determine what and how much of a good or services to produce. The decision of which resources to use, in what combinations, and with what technology, is made by individual businesses. They use the mix of human, natural, and capital resources that minimizes production costs and maximizes profits. Human resources earn income which determines the amount of goods and services they can purchase. Producers compete for consumer dollar votes and use information about spending patterns and their production costs to make production and pricing decisions.

Over time, different methods have been used to facilitate the exchange of goods and services. These range from barter to commodities to **representative money** to **fiat money**. Students in grades 4-5 need to know different ways goods and services have been exchanged, characteristics of money, and functions of money. (See Standard Two, grades K-3 for more information on different exchange methods, characteristics and functions of money.)

Economics Standard Three 6-8a: Students will demonstrate the ways in which the means of production, distribution, and exchange in different economic systems have a relationship to cultural values, resources, and technologies.

Essential Questions:

- To what extent does the type of economic system impact a society's standard of living?
- To what degree are societal decisions that affect the economy made in non-economic ways?

How different economies produce, distribute, and exchange goods and services depends on how cultural values, resources, and technologies differ. By building upon students' knowledge of production, distribution, and exchange factors taught in grades 4-5, students will apply knowledge of different cultural values, resources, and technologies to those factors.

Cultural values, when applied to economic systems, include religious beliefs, governmental structures, and customs. Religious beliefs can heavily influence the production, distribution, and exchange of goods and services. For example, in an Amish economy, religion dictates how goods and services are produced. Culture also includes government structure and the degree to which government influences the decisions about production, distribution, and exchange. Although the American economic system is seen as a mixed market system, there are instances of government intervention to protect property rights, ensure competition, promote equity in the distribution of goods and services, regulate businesses, provide public goods and services, and reduce externalities. Like religion and government structures, customs will also determine how goods are produced, distributed, and exchanged. Anyone that has ever ordered a favorite food while away from home and received a product that wasn't anything like what they expected has experienced how customs vary and influence the production of goods and services.

The amount and quality of resources (human, natural, and capital) varies among economic systems and influences production, distribution, and exchange of goods and services. In areas where there are large numbers of workers, goods may be produced by hand rather than using more expensive capital goods for production. Availability of natural resources will also influence the production of goods and services. As an example, pencils made in the United States often use cedar wood, while those produced in China use tropical woods because of the difference in availability. By using the resources that are most plentiful and accessible, economic systems can achieve efficiency and higher standards of living.

Technology is the methods and processes used to produce goods and services. Changes in technology over time lead to increased productivity and a society's increased ability to produce more goods and services. This increase in output raises standard of living as measured by gross domestic product per capita. New technologies can have costs and benefits which can have future unintended consequences. They also promote innovations leading to new ways of living.

Economics Standard Three 9-12a: Students will analyze the wide range of opportunities and consequences resulting from the current transitions from command to market economies in many countries.

Essential Questions:

- Why do some economies in transition experience success and others fail?
- Why might citizens of a society question whether an increase in the standard of living improves the quality of life?

During the 20th century, countries around the world experienced major systemic changes in their economies. Because of revolutions in transportation, communication, and information processing, the world has shrunk and interdependence has become greater. The shifts from command to market systems since the early 1990s have changed the way national economies function and have had major impact on those countries making the transition, as well as the countries which already had a market structure in place. All economic systems attempt to address goals for their economies. Because of scarcity, trade-offs have to be made among the six primary goals -- efficiency, equity, freedom, growth, security, and stability.

A. Efficiency -- Getting the most of one's resources for the least cost. For the consumer, this means acquiring wants while giving up the least amount of income and time. For the producer, this means paying the lowest possible price for land, labor, and capital then maximizing the value of output.

B. Equity -- Fair distribution of resources, goods and services. The problem is that "fair" is differently defined by many individuals and groups.

C. Freedom -- Owning, controlling, and making decisions about how to use one's own resources.

D. Growth -- Overall increase in the production of goods and services in an economy during a specific period of time (measured by gross domestic product adjusted for inflation).

E. Security -- Knowing that one has a job and can support oneself and family (measured by the unemployment rate).

F. Stability -- Overall general level of prices remains about the same (measured by the inflation rate).

To get more of any of these goals requires trading off one or more of the others. For example, to get a fairer distribution of resources to increase equity, it is necessary to fund this goal by increasing taxes which reduces the freedom of people to make decisions regarding their income. Economic growth is realized when more and more of the available productive resources in the society are being used. To get resources such as labor to respond to new demand, employers have to pay higher wages to cause them to switch jobs. This increases the cost of production and puts upward pressure on prices which decreases price stability.

In command systems of the 20th century, the productive resources were owned and controlled by the government who had central planners deciding what to produce and how to produce it. The goals which these systems emphasized were equity and security. The former command systems guaranteed everyone would have a job so there was no unemployment as defined by a market economy. This meant that in many instances inefficient use was made of labor, capital, and materials. Although housing, education, pensions and health care were provided by the state, an individual had little choice in how they accessed and acquired these services. Nor could one have any influence over the quality of the goods and services. Many productive resources were spent and consumed by and for the military which meant little attention was given to consumers wants. Consequently, the standard of living as measured by real gross domestic product per capita in the command economies fell far short of that in the market systems.

Market systems place major emphasis on freedom, efficiency, and growth. The proponents of the market believe that when these goals are realized, security and equity will logically occur since growth creates new jobs for more people. Since Adam Smith wrote the Wealth of Nations in 1776, the theory that the invisible hand of self-interest would create the greatest good for the greatest number has driven the market systems.

Underpinning these systems are the specific characteristics of private property rights, a profit motive that spurs growth, a price system for allocating resources, goods, and services, competition, and freedom to make individual decisions about how to use resources. In the market systems, the role of government Adam Smith envisioned was to protect property rights, insure competition, and provide public goods and services like roads and national defense. Over time, many nations have evolved as mixed market systems with government's role expanding to include regulating businesses, reducing externalities, and redistributing income.

When moving from a command to market system, a society experiences a major shift in values and priorities related to its economy. The incentives are altered. A significant change is that each person became responsible for his/her own well being through one's own decisions. Employment is no longer guaranteed and workers must compete for the jobs available. The income of many individuals will not cover the costs of the goods and services once provided by the state. Transitioning economies face such issues as: privatization of resources and industries; the necessity for profits to encourage entrepreneurs; elimination of price ceilings on all goods and services; a monetary system to act as financial intermediaries. Another area which causes problems is the corruption of former employees of the state whose insider knowledge allows them to get ahead more quickly than the general population. Shortages of goods were a result of the price ceilings when government planners kept prices artificially low. The inefficiencies caused by queuing resulted in less output for the whole economy because if one stands in line one is not working. Therefore, the shortages persisted and in many cases became worse. Many command economies experience high rates of inflation when the prices are set by market forces rather than the government. Real purchasing power declines and many people become poorer in the short run while adjustments are made through markets for goods and services. The challenge for the old command economies was to provide the legal framework for the shift to a market such as privatization, a stable monetary system, and the use of prices set by market forces to allocate resources to their most highly valued uses. Those countries which have done this successfully have seen increases in the standard of living for their citizens.

ECONOMICS STANDARD FOUR: Students will examine the patterns and results of international trade [International Trade].

Enduring Understandings

Students will understand that:

- Individuals and nations trade when all parties expect to gain.
- Nations with different economic systems often specialize and become interdependent as a result of international trade.
- Government actions that promote competition and free trade among people and nations increase the health of an economy and the welfare of nations.

As specialization and the division of labor have increased, individuals, communities, and nations have engaged in trade which increases the standard of living. By specializing in what one can produce at the least cost and trading that with others, efficient use of resources can be attained and overall benefits increased. Economists call this process **comparative advantage**. Costs incurred by international trade include unemployment increases in the short run as labor resources are reallocated. Benefits from that trade are lower prices and better quality to consumers whose purchasing power increases. As a result of international trade, people on the planet have become more and more interdependent. Economics as a discipline provides the lens for focusing on how best to use the world's limited resources.

<u>Economics Standard Four K-3a</u>: Students will understand that the exchange of goods and services around the world creates economic interdependence between people in different places.

Essential Question:

- Why does trade create interdependence?

International trade is based on the idea that people and businesses should specialize and produce those goods and services they can produce at the lowest cost and trade for those goods and services which are more costly for them to produce. Such specialization creates interdependence between individuals and businesses both within a country and internationally.

In the very early grades, students can observe specialists in their classroom, school, and community and look at how specialization creates interdependence. For example, schools have many specialists. These might include, teachers, custodians, cafeteria workers, and so on. These individuals each perform a specific task that contributes to the running of the school. They all depend on one another to complete their jobs so the school will run smoothly. If one group of specialists fails to do their work, then there will be problems.

However, by grade 3, students must understand the principles of specialization and interdependence in a broader context beyond their immediate environment of family, school and community. The standard requires that students see that exchanging goods and services by individuals from different countries creates interdependence. In other words, when people in one country specialize and produce specific goods, they depend on other countries to produce goods they don't produce. It results in more goods being available for consumption, but it also means that individuals rely on others from different places to trade with them to obtain goods they want and don't produce.

<u>Economics Standard Four 4-5a:</u> Students will demonstrate how international trade links countries around the world and can improve the economic welfare of nations.

Essential Question:

- Under what conditions does international trade occur?
- To what extent does international trade increase standards of living?

International trade often takes place between private citizens, both consumers and producers, who live in different countries. These citizens specialize in the production of the least costly goods and trade for goods that are more costly to produce. Citizens, both importers and exporters, from these countries trade because they expect to be better off. For example, Americans might decide to import cars and bananas and export wheat and machinery because they expect to gain. The same goes for individuals in countries that sell cars and bananas to Americans and buy wheat and machinery from Americans. Given their resource base, both countries benefit from trade.

International trade results in individuals specializing, which increases production or the overall amount of goods produced. When the average level of goods and services available for people to consume increases, material standards of living rise; that is, on average people have more and different goods and services. However, because international trade links countries around the world, citizens in both countries are interdependent. They depend on one another for the production of goods and services they don't produce. International trade has costs as well as benefits. One of these costs is the possibility that a trading relationship can break down and cause hardship to citizens in both countries.

Economics Standard Four 6-8a: Students will examine how nations with different economic systems specialize and become interdependent through trade and how government policies allow either free or restricted trade.

Essential Questions:

- Should a country specialize and trade?
- Does everyone *always* benefit from free trade?
- To what extent should government make rules for trade?

Through international trade countries specialize and become interdependent. Trade occurs for several reasons. Sometimes the resources needed to produce a product are more abundant in one country than another. Foreign producers might have a production advantage over domestic producers. Once international trade takes place, governments often enact policies to restrict or allow free trade. Either way, government policies will affect consumers and producers.

Specialization promotes increased production and efficiency. Because of the quantity and quality of resources a nation has, a foreign producer might be able to specialize in the production of a good and service at a lower cost than domestic producers. Consumers make the rational decision to purchase at the lower cost regardless of the product's origin. A consumer in one country and a producer in another participate in trade freely because each benefits. These trading partners develop interdependence. This trading arrangement allows each country to consume at higher levels which leads to an increase in standard of living. However, employees in the higher cost industries will experience unemployment and have to seek other jobs. If there is a disruption in the trading relationship due to a change in supply or demand, a country may lose access to goods and services for which they traded or markets for which they produced goods.

Government policies often restrict trade. Several types of trade restrictions are commonly used: tariffs, quotas, embargoes, subsidies and product regulations.

Tariff – A tax that is added to an imported good or service. Tariffs reduce competition by increasing the cost of a good and increasing price. Higher prices lead to an increase in profits for domestic producers in protected industries. Protective tariffs do not face opposition very often because of the way the increased cost is spread among many consumers and because the benefit is more direct to the protected producers.

Quotas – Limits that are set on the quantity of a good that a country may import. Quotas reduce the quantity supplied of the import and cause price increases. The 1980s saw countries placing voluntary quota requirements on their exports. Such is the case of Japanese automobiles. The effect of Japan placing the quota on the good is the same as if the U.S. placed the quota -- decreased supply and higher prices. The difference is that Japan will benefit from the higher price received and still be able to sell all of its goods.

Embargoes – Students have little trouble understanding embargoes or economic sanctions taken by the U.S. against other countries. Embargoes are often placed by Presidential or Executive Order. Penalties for violating the embargoes are high. Embargoes can also be placed against a certain good or industry such as rough diamonds, narcotics, or weapons. Cuba is a country where the U.S. has a long standing embargo.

Subsidies – Financial consideration to producers for the manufacturing, production or exporting of goods. Subsidies can take many forms, such as direct cash payments, credits against taxes, or loans at terms that do not reflect market conditions. Subsidies will distort the market for the good being subsidized by lowering price, misallocating resources, and reducing competition. U.S. industries that feel their share of the market has been harmed by subsidies may request counter measures that increase and return the price of the import to market levels encountered prior to the subsidy.

Product regulations or standards – Laws that define production, manufacturing, transportation or packaging of goods. In most cases, imported goods must meet the regulations and requirements of domestic goods. For example, food that is imported to the U.S. must pass quality and grade standards set by the U.S. Department of Agriculture. Food packaging requirements include: name of the product, net quantity, manufacturer information, statement of ingredients and nutritional information. Other restrictions are set to protect human, animal and plant health, as well as the safety and pocketbooks of citizens. Other examples would be seatbelt requirements or Underwriter Laboratories, Inc. (UL) certification of safety.

With all of these barriers, except subsidies, domestic consumers pay higher prices for imports. Subsidies distort the market by misallocating resources. Often these policies are used to protect domestic producers and their workers. Because the price of imports is often higher, consumers are more likely to buy products made in their country. These policies create less competition which ultimately leads to higher prices, fewer choices and lower quality. Economists generally believe that free trade benefits society as a whole. Free trade agreements lower costs to consumers and force high cost producers out of the market, while domestic workers may lose jobs or suffer layoffs. Students should be able to analyze how government policies affect them as consumers, workers, and producers.

<u>Economics Standard Four 9-12a</u>: Students will analyze and interpret the influence of the distribution of the world's resources, political stability, national efforts to encourage or discourage trade, and the flow of investment on patterns of international trade.

Essential Questions:

- To what extent is a nation's standard of living related to its trading patterns?
- How might changes in trading patterns affect the distribution of income and quality of life globally?
- To what extent should developed nations trade with less developed nations?

Underlying the area of international trade is the concept of why individual consumers and producers trade at all rather than being self-sufficient. Voluntary exchanges occur when trading partners both believe they will be better off after the trade. Nations do not trade; they establish the rules of trade. The individual consumers and producers of different nations make exchanges based on analyzing the costs and benefits of the trade. Historically, trade developed as people realized that some were more efficient engaging in the production of some goods and services while other people could produce other things at a lower cost. If both parties specialized, they could then trade for the others' goods and services and both would expend fewer resources. Economists call this concept **comparative advantage**. A nation can be the lowest cost (most efficient) producer of many goods or services but, through specialization, can increase its consumption and standard of living by trading. When there is competition in markets, prices act as signals that determine consumer buying patterns, which, in turn, cause producers to react to stay in business. The result of trade for the consumer is lower prices, more choice, and generally higher quality. Patterns of international trade develop and are maintained for many reasons.

How the productive resources of land, labor, and capital are distributed globally is based on geography. What a country can produce on its own is directly related to the quantity, quality, and types of resources it has. The quantity and quality of a nation's natural resources, labor, and capital determine what that country produces and what the most efficient methods of production are for those goods and services. Economists refer to a country as land, labor, or capital intensive, meaning that it has a more abundant supply of one of these three productive resources; therefore, the country uses its least cost method in production processes. Some countries have a balance among the three factors of production. For example, when looking at the world's food supply, countries with high population employ labor more than capital for farming because it is cheaper. Therefore, a large proportion of the population is engaged in agriculture, much of which is subsistence. These countries tend to have a much lower GDP per capita than the industrial nations. In countries like the United States, France, Italy, and Canada, using capital goods for farming allows other workers to engage in the production of other goods and services which increases the standard of living. What each nation has the comparative advantage in producing and what goods and services their consumers demand impact trading patterns and trading partners.

Another factor influencing trading patterns is the political stability or the lack of it in countries who want to trade. Many of the poorer countries have problems with their economies not because of a lack of resources but because of government instability, conflicts with neighbors, and civil strife at home. Conflicts among nations and people have resulted from a clash over resources -- who has them and who does not.   Conflicts not directly caused by a fight over resources are usually settled in favor of who has the most resources and uses them most efficiently. History also often sets the stage for trading patterns based on former colonial relationships and most favored nations trading status.

Governments of all nations engage in policies that encourage and discourage trade. Free trade, or few barriers to trade, results in the more efficient use of resources, generally increasing the GDP per capita in a country. Distribution of that increase can be a problem politically if citizens perceive that it is not fairly allocated. Erecting and maintaining trade barriers - such as tariffs, quotas, subsidies, embargoes, and standards - generally has short run positive effects for the industries, their employees, and the suppliers that are being protected. Barriers are instituted to protect jobs in domestic markets, industries that are just getting started, or to provide strategic defense. However, the long run results for consumers in that country are higher prices, less choice, and lower quality products. Trade barriers erected by one country often lead to retaliatory barriers being placed on their exports by other countries. Therefore, there may be an increase in unemployment or displaced workers in the industries related to exporting, including transportation, while at the same time protecting workers in inefficient industries.

Lastly, the flow of investment internationally impacts the patterns of trade. The amount of a nation's demand for imports and exports requires a two-step process. When U.S. firms export goods to Germany, the U.S. exporter wants to be paid in dollars. The German importers have euros and have to exchange them for dollars to complete the trade. This is accomplished through the currency exchange markets. American exports create a foreign demand for dollars, and the payment of this demand means that American banks now have a supply of euros available to American buyers. The U.S. bank is a dealer in foreign exchange. It is in the business of buying and selling for a fee, euros for dollars. That same bank sells euros for dollars to finance American imports (German exports). Since the German exporting firm wants to be paid in euros, the American importer must exchange dollars for euros.