

Lesson Title: Government and Economics, Understanding Wants and Needs in the Market

Grades: 6-8

Duration of Unit: 1 – 50 Minute Class Period

STAGE 1 – DESIRED RESULTS

Montana State Standards:

Math Common Core: 6. Statistics and Probability

Summarize and describe distribution: 4. Display numerical data in plots on a number line, including dot plots, histograms, and box plots.

Math Common Core: 8: Statistics and Probability

Investigate patterns of association in bivariate data. 2. Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.

Social Studies Content Standard 2: Students analyze how people create and change structures of power, authority, and governance to understand the operation of government and to demonstrate civic responsibility.

4. Analyze and explain governmental mechanisms used to meet the needs of citizens, manage conflict, and establish order and security. **End of Grade 8.**

Understanding(s) /Big Ideas:

Students will understand the difference between the markets of public goods and services and private goods and services. Students will understand the market differences between wants and needs.

Essential Question(s):

What is the role of government in the US food system? Do wants and needs have the same reaction on the market to oversupply?

Students will know: Taxpayer dollars assure that US citizens have an abundant and affordable food supply.

Students will be able to: Distinguish between needs which are generally public sector goods and wants which are generally private sector goods.

STAGE 2 – ASSESSMENT EVIDENCE

Performance Task(s): Worksheet on sections of desired results.

Other Evidence: Verbalized understanding of concepts through discussions.

STAGE 3 – LEARNING ACTIVITIES

Learning Activities:
Vocabulary:

Public goods and services: Goods and services used by a society as a whole. No one within the society may be excluded from enjoying their benefits.

Private goods and services: Goods and services that are purchased by households and used to benefit only themselves.

Shared consumption: A characteristic of a public good that is consumed by more than one person at the same time (e.g., national defense, police protection, public parks).

Opportunity Cost: Value of the second choice given up to pursue your first choice.

Price Taker: Those companies that cannot dictate their prices set by more dominant buyers in the market.

Price Setter: Those companies that have the power to dictate the price its customers pay for goods and services.

Government and Economics:

Just as individuals must make choices that involve trade-offs and opportunity costs, so must societies. In the United States individuals have a great deal of freedom to make their own economic decisions. These decisions determine how the available resources will be used and which wants will be satisfied by the producers of *private goods and services*.

State, local, and federal governments play important roles in the United States economy as well. Governments purchase goods and services and employ resources in order to provide services to citizens. These are known as *public goods and services*. For example, education is a responsibility of local governments in Montana. Schools are also regulated and partially supported by state and federal funding. Public services include fire and police protections, road building and maintenance, national defense, Social Security and Medicare.

Governments receive their revenue mostly from taxation. Some taxes are general and are not tied to specific purposes. Other taxes are limited to specific expenditures. One example is a gasoline tax. The revenue from this tax is used to build and repair highways.

Our taxes also go to ensuring that we all have an abundant, affordable food supply. You see, the prices farmers receive for their products can vary a great deal from year to year because of influences such as the weather. It is not unusual for prices to stay low for more than one year causing financial instability for many farms and the rural communities they support.

Rather than losing billions and perhaps trillions of dollars of rural infrastructure, our government provides a safety net for much less cost when prices are low. That way, more farms stay in business and continue producing the food and other products the rest of us rely

upon.

Wants and Needs

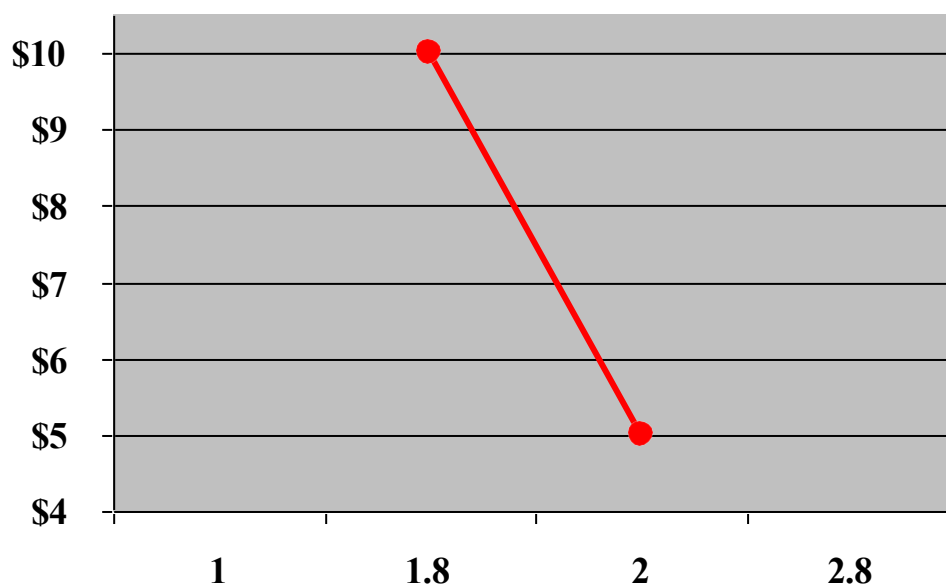
There is a need for an abundant, affordable food supply. We ensure that this will happen with a portion of the taxes that we pay. Thus, an abundant, affordable food supply is classified as a public good. A want such as the purchase of a bicycle does not involve tax money and is classified as a private good.

Graphing the demand: Wants and Needs

A graph for wheat demand looks much steeper than the graph for bicycle demand on the next page. It is steeper because the quantity of wheat demanded changes very little with dramatic price changes. We consume approximately the same amount of wheat regardless of whether the price is high or low.

WHEAT

Basic agriculture products like wheat, used to make bread or noodles, have demand based much more on need than want.

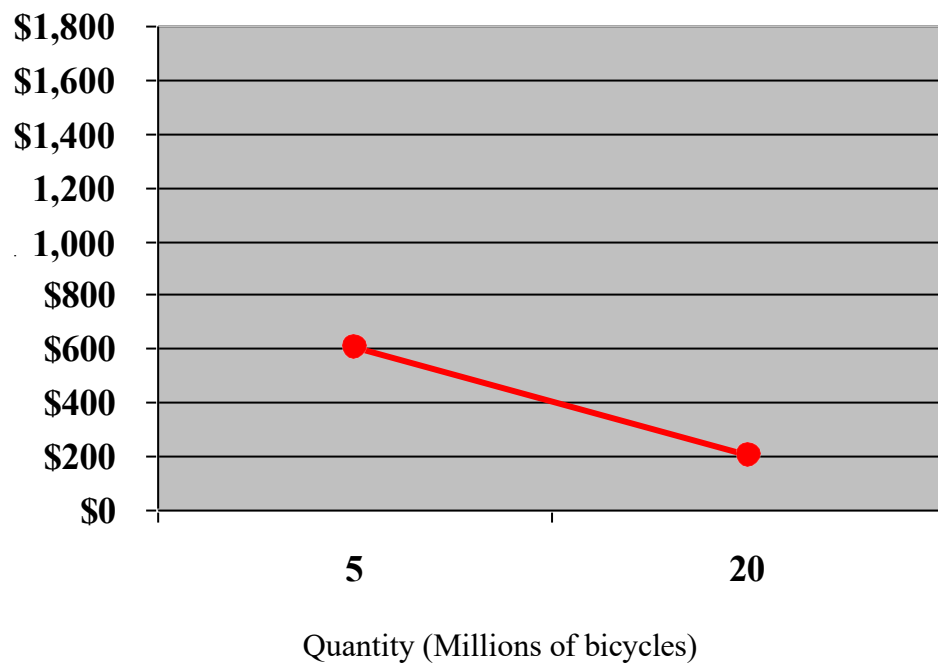


Notes:

BICYCLES

A graph for bicycle demand looks much flatter because the quantity demanded changes dramatically with changes in price. Consumers buy a lot more bicycles when prices are low rather than high.

Private goods products like bicycles have demand based much more on want than need.



Notes:

Total revenue comparisons between wants and needs when quantity demanded changes.

If bicycle sellers have too many bicycles they can reduce the price (they are price setters) and their Total Revenue increases. (Because quantity demanded increases dramatically with lower prices.)

<u>Price</u>	x	<u>Quantity</u>	=	<u>Total Revenue</u>
\$600/bicycle	x	5 million	=	\$3000 million (\$3 billion)
\$200/bicycle	x	20 million	=	\$4000 million (\$4 billion)

Reducing the price from \$600 to \$200 increased Total Revenue from \$3 billion to \$4 billion.

If wheat sellers produce too much wheat then the price they are offered (they are price takers) is less and their Total Revenue decreases. (Because quantity demanded changes very little with price changes.)

<u>Price</u>	x	<u>Quantity</u>	=	<u>Total Revenue</u>
\$10/bushel	x	1.8 billion	=	\$18 billion
\$5/bushel	x	2.0 billion	=	\$10 billion

Reducing the price from \$10 to \$5 decreased Total Revenue from \$18B to \$10B.

If bicycle makers produce too many bicycles, they reduce the price with a sale and their Total Revenue increases.

But if wheat producers produce too many bushels their prices drop dramatically and their Total Revenue decreases.

Summary:

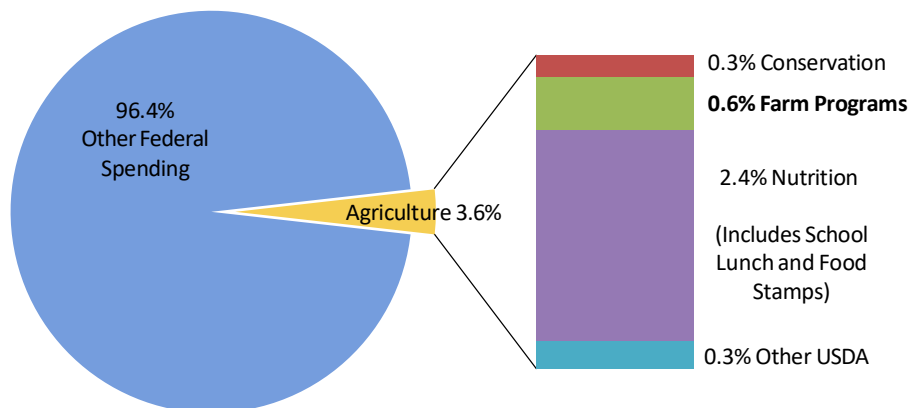
Wheat producers generally produce a little more wheat than we need, which is better than not producing enough. But this extra production reduces prices drastically, from \$10/bushel to \$5/bushel in our example, because no one wants to buy more wheat (bread and noodles) than they can eat.

If wheat producers continue to produce a little extra each year (much better than producing too little) then they will be faced with low prices year after year and will go out of business. Not only will wheat producers suffer but so will the rural communities they support, which is why our government provides a safety net when prices are low.

The market works better for bicycles than it does for wheat!

United States Department of Agriculture (USDA) Farm Programs attempt to correct this market failure for wheat and other basic agricultural commodities by providing a safety net for farmers when wheat prices are low. Thus, to keep farmers in business during periods of low prices we have developed a farm program. The farm program uses a very small portion of our taxes to ensure an abundant, affordable food supply. The farm programs that provide a safety net for farmers is less than one percent of the U.S. budget.

Agriculture Portion of U.S. Budget



US Government Tax Receipt

<http://www.whitehouse.gov/2012-taxreceipt>

Other sites for tax data (comparison only)

Where did my tax dollar go?

http://www.wheredidmytaxdollarsgo.com/tax_payers

Can I get a receipt for that:

<http://canigetareceiptwiththat.com/>

This lesson based partially upon information provided by Ohio Farm Bureau Federations "Lessons in Economics."