MACROECONOMIC CONCEPTS

from
ECONOMICS: A FRAMEWORK FOR TEACHING THE BASIC CONCEPTS

Teacher's Guide
MACROECONOMIC
CONCEPTS

from Economics:
A Framework for
Teaching the Basic Concepts

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ECONOMICS: A FRAMEWORK FOR TEACHING THE BASIC CONCEPTS
Grades: 9-12

GENERAL DESCRIPTION OF THE UNIT OF STUDY

*economics: A Framework for Teaching the Basic Concepts* is a live-action, three-part Unit of Study for grades 9-12, which presents a review of the fundamental principles of economics, and introductions to the concepts of microeconomics and macroeconomics. The Unit of Study examines how scarce productive resources are used to satisfy human needs and wants, and how markets and government policy regulate the process.

UNIT GOALS

The materials in this Unit of Study are designed to assist students in developing a working knowledge of:

The fundamental concepts underlying all economic study, including scarcity; opportunity cost; economic systems and institutions; and distribution and exchange, which are the foundation of all economic activity. Microeconomic concepts such as markets; supply and demand; competition; income distribution; and the role of government, which together determine the flow of money and factors of production in economies. Macroeconomic concepts such as Gross National Product; aggregate supply and demand; unemployment; inflation; and monetary and fiscal policy, which are functions of economic aggregates or averages.

Specific student objectives are contained in the teacher's guide for each video lesson. These objectives will assist students in grasping the fundamental concepts of each topic. By achieving these objectives for each video lesson, students will be able to accomplish the unit goals.
MATERIALS IN THE UNIT

This Unit of Study contains three individual videocassettes—one for each video lesson. The titles and a brief description of the contents of each video are provided below. The programs may be viewed independently or as a unit, and do not need to be in any particular sequence, although you may find it helpful to present Part One: Fundamental Economic Concepts, as a review of, or introduction to, fundamental economic principles and terms, before presenting Part Two: Microeconomic Concepts, and Part Three: Macroeconomic Concepts.

The lesson contained in this teacher's guide appears in bold print.

Part One: Fundamental Economic Concepts
Economics is the study of the use of limited resources to produce and distribute goods and services. This program, which may function as an introduction or as a review, examines the principles that are at the core of economics. Scarcity leads to opportunity cost decisions — the necessary choice between economic options. Fundamental Economic Concepts equips students with an understanding of historical economic systems. The program then focuses primarily on the structure and function of the free-market economy, and explains the institutions and incentives that have developed to regulate production and distribution of goods, services, and money, which are exchanged in the world marketplace. Running time: 29:16 minutes.

Part Two: Microeconomic Concepts
Microeconomics is the study of how markets work; it examines factors that influence, and result from, the inner workings of economies. Specifically, it looks at how businesses in the market economy go about using limited resources to produce and distribute goods and services. This program demonstrates how the market sets prices and determines the quantity and nature of goods and services produced, and demonstrates the roles of competition and regulation. The character of a well-functioning market economy—with its back-and-forth flow of money and factors of production—is analyzed. What happens when the market process fails, and the tools available to correct market failures are explained. Running time: 26:24 minutes.

Part Three: Macroeconomic Concepts
Macroeconomics is the study of the factors that influence, and result from, the large scale functions of economies. It is the way economists measure the behavior and functioning of economies. To do this, economists quantify aspects of the economic process using economic aggregates, or averages — measurements such as the Gross National Product, unemployment, and inflation. This program looks at how these measurements can provide insight into the health of an economy, how they impact the purchasing power of currencies, and ways governments can control and impact economic aggregates. Running time: 28:43 minutes.

Teacher's Guides
A guide has been provided with each program in this unit to aid the teacher in utilizing the materials contained within this unit. It contains the following:

• Suggested instructional procedures for each lesson,
• Viewing guides,
• Discussion questions and projects for each lesson,
• Quiz,
• Answer keys for blackline master activities,
• Transcript of the script.

Blackline Masters
Included in the unit are blackline masters for duplication. These activities are designed to reinforce the information in the videos, to provide extended learning activities for the students, and for evaluation purposes.
Unit of Study Materials
Should you use this Unit of Study in its entirety, a Unit Test accompanies this package of materials. This test is designed to provide assessment of comprehension for the three-part program, and should be administered at the conclusion of the Unit of Study. An answer key for the Unit Test is provided on pages 15-17.

INSTRUCTIONAL NOTES

It is suggested that you review each program and read the Suggested Instructional Procedures before involving your students in the lesson activities. In this way you will become familiar with the materials and be better prepared to adapt to the needs of your students. You may find it necessary to make some changes, deletions, or additions to fit the specific needs of your class. We encourage you to do so, for only by tailoring this program to your students will they obtain the maximum instructional benefits afforded by the materials.

It is also suggested that the video presentation take place before the entire group under your supervision. The lesson activities grow out of the context of the video; therefore, the presentation should be a common experience for all students.

Program Three
Macroeconomic Concepts
Viewing Time: 28:43 minutes

SUGGESTED INSTRUCTIONAL PROCEDURES

Teacher Preparation
• Preview Part Three: Macroeconomic Concepts
• Duplicate blackline masters 1-8.

It is suggested that you relate the learning of basic economic concepts to some of the principal international, national, and local, economic issues of the day. We suggest watching the news and reading the newspaper for a few days in advance of showing the video, and raising the issues of the day in order to illustrate macroeconomic principles and to pique interest.

Internet Resources for Teachers
There are vast quantities of information available on the Internet for economic study. These sites are from many countries, and may be useful for extended activity projects, and to provide up-to-date information. Some of the best sites are as follows:

http://ecedweb.unomaha.edu/teach.htm
Economic resources on the Internet for K-12 teachers. Compiled by economics educators, it includes detailed descriptions and links to all recommended sites.

A list of selected Internet resources for teachers of economics in secondary schools. Again, links to suggested sites make this more useful.

http://netec.mcc.ac.uk/JokEc.html
http://quasar.csuchico.edu/econ/links/econhumor.html
Both of these sites are filled with jokes about economics and economists. The best of them require a knowledge of economic concepts to understand the humor.
Student Objectives
Keep the following student objectives in mind throughout the lesson. After viewing the program and participating in the accompanying activities, students will be able to...

- Define key terms, such as:
  - Gross National Product
  - Gross Domestic Product
  - aggregate
  - aggregate demand
  - unemployment
  - depression and recession
  - inflation and deflation*
  - gold standard
  - private and public sector
  - median
  - average

- Inflation is the rate of change in the cost of goods and services; the change can be an increase or a decrease. Deflation only occurs when the rate of change drops below zero and yields a negative number. (See worksheet #1, Reading Graphs, for examples of deflation in 1949 and 1954.)

- Figure averages and medians, explain the differences between them, and describe why economists often find one more useful than the other.

- Identify the major factors which affect a country's Gross National Product and Gross Domestic Product: population expansion or contraction, entrepreneurism, trade, and war.

- Differentiate between Gross National Product and Gross Domestic Product, and explain why many economists now favor GDP as a better measure of the country's economic activity.

- Name the seven categories of origin of supply: manufacturing; construction; agriculture/fishing/natural resources; transportation/communication/utilities; wholesale and retail; finance/insurance/real estate; and other services.

- Describe the effects of unemployment on an economy.

- Illustrate the relationship between a country's monetary policy and its economy.

- Illustrate the relationship between a country's fiscal policy and its economy.

- Provide examples of private and public sector businesses.

- Use graphs, charts, and tables to glean economic information and report it to others.

Introducing the Video and Pre-Viewing Activities
Tell students they are going to see a program about macroeconomics—the study of economic averages, or aggregates, which can help economists discern the overall health of an economy. In order to assess what students already know about macroeconomics, you may want to discuss the concept of free-market economies before showing the program.

In order to help students identify the crucial concepts in the video, distribute Blackline Masters 1 and 2, Viewing Guide, for them to complete during or immediately after the presentation. You also may want to provide a quick review of graphs, charts and tables as they are used to illustrate economic concepts; use Blackline Master 5, Reading Graphs for this purpose.

- Present the video. The viewing time is 28:43 minutes. A Video Quiz immediately follows the video presentation which can be found on Blackline Master 3.

Follow-Up Discussion Questions
You may choose from the following questions to conduct a class discussion. Feel free to add or delete questions to suit the needs of your audience. These questions appear, without answers, on Blackline Master 4, Discussion Questions, and may be duplicated and distributed prior to the class discussion.
1. What is macroeconomics?
Macroeconomics is the study of economic aggregates or averages. In particular, it looks at output, income, and the interrelationships among sectors of the economy.

2. Why would the average sometimes not give you an accurate picture of the group, and what option would you have? If there are much larger or smaller quantities in the group of figures, the average can be skewed up or down. In these cases, the median is a better representation because it represents the middle of the group.

3. What reasons did the video give for finding median home prices?
To compare prices over time (such as from year to year) or to compare prices in different areas.

4. What is Gross National Product?
The sum of the production of goods and the supply of services in a given country, including business done by that country's producers overseas.

5. What is Gross Domestic Product?
The sum of the production of goods and the supply of services in a given country, including business done by foreign countries' producers within its boundaries.

6. Name the five factors that affect the GNP or GDP. Briefly define each.
Population expansion or contraction; entrepreneurism, the creation of new goods and services; trade with other countries; war; through destruction or through expansion of trade; natural resources - their discovery or depletion.

7. What were the seven prime categories of origin of supply named in the video? Briefly define each.
1. Manufacturing - production of durable and non-durable goods.
2. Construction - building of structures.
3. Agriculture/Fishing/Natural Resources - use of the country's natural resources.
4. Transportation/Communication/Utilities - electricity, communication, and movement of people and goods.
5. Wholesale and Retail - the selling of products.
6. Finance/Insurance/Real Estate - services such as banking, stock trading, and the provision of financial safety nets.
7. Other Services - doctors, lawyers, and amenities such as tourism and restaurants.

8. What is aggregate demand and why should it be important to everyone?
Aggregate demand is the percentage of income spent by an individual. If you have low aggregate demand, you could save or invest your money, which is desirable; if you have high aggregate demand, you may go into debt, which is undesirable.

9. What three causes of unemployment did the video discuss? Lack of skills or education, a surplus of a certain skill, or the failure or restructuring of a business.

10. What are inflation and deflation?
Inflation is the amount of increase or decrease in the cost of goods and services. When the change yields a negative number, it is deflation.

11. What is monetary policy?
Because money is a human construct and need not be backed by anything, the government can increase or decrease the amount of money in circulation to affect inflation. Monetary policy also refers to the ability of the central bank to influence interest rates, and thereby encourage or discourage spending.

12. What is fiscal policy?
Fiscal policy is the decision by governments whether or not to spend more money than it takes in (deficit spending).
13. What are two other ways the video mentioned that governments can affect economic aggregates? Moving businesses from the public to the private sector, or vice versa, and trade policy.

Follow-Up Activities and Extended Discussion
1. Distribute Blackline Master 3, Video Quiz. Like the Viewing Guide, this brief quiz encourages students to pay attention to key terms and concepts, and promotes recall. The Video Quiz immediately follows the video presentation. You may wish to stop the videotape and distribute Blackline Master 3, Video Quiz before proceeding with the quiz.

2. Distribute Blackline Master 5, Reading Graphs. This worksheet is designed to encourage students to use graphs to gather as much information as possible. Discuss how much more accessible information can be in a visual format as opposed to a long list of numbers.

3. Distribute Blackline Master 6, Math Exercise. Explain that these exercises—in which groups of numbers are organized in different ways to answer different questions—are key to economics.

4. Distribute Blackline Master 7, Vocabulary Exercise. Many key macroeconomic terms are similar to one another. Tell students to be aware of how these words are used within the context of the subject.

5. For students or classrooms with Internet access, distribute Blackline Master 8, Internet Activities. Have students pick one or more activities.

6. Practice finding averages and medians. Tell the students that they will be working on these with their activity sheets. Using groups of numbers from their own lives, such as ages (including the teacher's), Grade Point Averages, numbers of family members, etc., find both averages and medians.

7. Look further into the effect of fiscal policy. Politicians frequently use phrases such as "selling out the youth" when talking about deficit spending. How will today's spending affect the class? If possible, have a state legislator come in to talk about the process of creating the state budget.

Also, discuss the current situation in the United States in which many legislators are trying to bring about a federal balanced budget amendment. Discuss the pros and cons of amending the Constitution to balance the budget. Does your state have a balanced budget amendment? (See Blackline Master 8, Internet Activities).

8. Have the class split into several groups to do further research into specific key concepts, both to expand on the information provided in the video, and to uncover more about how macroeconomics affects their lives. They may want to utilize encyclopedias, the Internet, interviews, surveys, etc. Upon completion they could write papers or do presentations. Encourage them to design graphs, charts, and spreadsheets with their data.

Sample topic ideas: What is your or your parents' aggregate demand? What is the percentage of unemployment in your community, and what factors affect it? What were some of the major causes and effects of the Great Depression? Look into monetary policy - why does paper money work?

9. Following the completion of this lesson, distribute Blackline Master 9, Quiz. This is intended to assess comprehension of the Student Objectives listed in this guide. Principles and ideas that need additional review will be apparent.
**Blackline Masters 1 and 2. Viewing Guide**

1. averages
2. median
3. aggregates
4. Gross National Product
5. population
   - entrepreneurism
   - trade war
   - natural resources
6. origin of supply
   - manufacturing
   - construction
   - agriculture, fisheries, and natural resources
   - transportation, communications, and utilities
   - wholesale and retail finance, insurance, and real estate other services
7. Gross Domestic Product
8. aggregate demand
9. Unemployment
10. depression
    - recession
11. inflation
    - deflation
12. monetary policy
13. gold standard
14. money supply
15. central bank
16. interest rates
17. fiscal policy
    - federal budget
18. deficit spending
19. private sector
    - federal government

**Blackline Master 3. Video Quiz**

1. False
2. b
3. c
4. b
5. d

**Blackline Master 5. Reading Graphs**

1. High inflation - Any high point on the inflation line.
   - Low inflation - Any low point above the baseline on the inflation line.
   - Deflation - 1949 or 1954, figures are below baseline.
   - Good time to have investments - Any of the highest peaks of the Prime Rate.
   - Bad time to be in debt - Any of the highest peaks of the Prime Rate.
2. At a minimum, students should observe that the three factors rise and fall at similar times, but that changes in the unemployment rate lag a few years behind changes in the interest and inflation rates.

**Blackline Master 6. Math Exercise**

1. Add all numbers - total = 604, divide 604 by 8 = 75.5. The average is 75.5.
2. Organize number list in sequence. Add the two numbers in the middle of the set (62.0 + 75.0 = 137). Divide 137 by 2 = 68.5. The median is 68.5.
3. GNP: $3.5 billion, GDP: $3.9 billion

**Blackline Master 7. Vocabulary Exercise**

1. Domestic
2. Public sector
3. depression
4. Monetary central
   - bank money
   - supply interest rates
5. manufacturing  
    construction  
    agriculture/fisheries/natural resources  
    transportation/communications/utilities  
    wholesale/retail finance/insurance/real estate  
    other services  
6. population  
    entrepreneurism  
    trade war natural resources  

Blackline Master 9. Quiz  
For each correct answer, score as follows: 1/2 point each for questions 1a and 1b, 1 point for question 2, and 2 points each for numbers 3, 6, and 7. Question 4 is worth a total of 7 points, question 5 is worth a total of 5 points. (Total, 20 points.) You may use this grading scale or one of your own choice.

1. a) 32 (in an uneven set of numbers, such as 11, the middle number is the median.) b) 42  
2. To compare prices over time or between areas.  
3. Aggregate demand is the percentage of income spent by each individual.  
4. manufacturing  
    construction  
    agriculture/fisheries/natural resources  
    transportation/communications/utilities  
    wholesale/retail finance/insurance/real estate  
    other services  
5. population  
    entrepreneurism  
    trade war natural resources  
6. Fiscal policy is the decision by governments about how they spend the money they take in, including whether or not they spend into a deficit.  
7. Inflation is the rate of increase or decrease in the cost of goods and services.  

UNIT OF STUDY TEST  
Score test as outlined in the answers. To assist in post-grading discussion, the lesson from which the questions are derived is printed in bold type in the answers.  
1. a) Microeconomic Concepts Any two of the following answers is acceptable (1 point each, total of 2 points): Improper transmission of signals Monopolies Third-party consequences Neglect of major social or environmental values  
   b) Microeconomic Concepts (1 point each): Regulations, Taxes, Competition  
2. Macroeconomic Concepts (1 point each):  
   median 35 average 46  
3. Fundamental Economic Concepts (1 point for an acceptable definition, 1 point each for the levels of operation of opportunity cost): If you have more of one thing you must have less of another, or; if you have one thing you cannot have another. Levels: global, corporate, individual, consumer.  
4. Macroeconomic Concepts (1 point): Aggregate demand is the percentage of income spent by an individual.  
5. Fundamental Economic Concepts (1 point each): Natural resources, labor, capital, other parts.  
6. a) Macroeconomic Concepts (2 points): GNP takes into account all business done by a specific country's producers, both
within the country and overseas. GDP looks at all business done within the boundaries of a country including business done by foreign companies.

b) **Macroeconomic Concepts** *(1 point each)*: Population, entrepreneurism, war, trade, natural resources.

**7. Fundamental Economic Concepts** *(7 point for each type of bank, 1 point for each description)*:
Central banks make sure there is enough money in circulation to cover all market transactions. Local banks store money, loan money, and provide financial services to help market transactions flow easily.

**8. a) Microeconomic Concepts** *(1 point each)*:
- free market; price; demand; supply

b) **Microeconomic Concepts** *(4 points)* examples will vary, but should demonstrate an understanding of the following model:

When the price of an item is high, people buy less of the item (decreased demand), and more of an inexpensive substitute (increased demand). The drop in sales drives the price of the expensive item down (as a way of attracting buyers), and may drive the price of the inexpensive item up. Eventually, equilibrium is reached.

**9. Macroeconomics Concepts** *(1 point)* Fiscal policy is the decision by government whether or not to spend more than they take in (deficit spending).

**10. Macroeconomic Concepts** *(7 point each)*:
- Manufacturing Construction
- Agriculture/Fisheries/Natural Resources
- Transportation/Communication/Utilities
- Wholesale and Retail Finance/Insurance
Economics is the study of the use of resources to produce and distribute goods and services.

In this program, we shall see that it is possible to quantify, or measure, aspects of the economic process with measurements such as the well-known Gross National Product, or GNP, which is the total of all the goods and services produced by a country. In this way, large-scale economic comparisons can be made over time and geographically, in, and among, countries.

The quantified entities of comparisons are called economic aggregates, or averages, and their study is called macroeconomics.

Macroeconomic Concepts

Before considering the major economic aggregates studied in macroeconomics, let's look at averages in general.

In a free-market economy, where price determines supply and demand, houses are continuously being bought and sold. In a given area, or neighborhood, such as Pine Ridge, ten houses were sold in two months. Here are the selling prices:

Selling prices: $118,900  
$120,300  
$120,800  
$124,400  
$130,600  
$132,500  
$145,000  
$164,400  
$178,200  
$965,500

$2,200,600 + 10 = $220,060

When totalled they equal $2,200,600. Divide this number by the number of houses and the average selling price of a house in Pine Ridge was $220,060. But one of these houses was larger and more expensive, while the others were less costly. Because it was priced significantly higher than the others, the mansion-type house skewed the average up. To counter this effect, economists often use a different kind of average called a median. The median is a number which represents half of the home values on one side, and half on the other.

So the median price for the Pine Ridge neighborhood is $131,550. This is a more accurate representation of the selling price of homes in Pine Ridge over the two-month period.

Now let's compare over time what has been happening with home values in Pine Ridge.

In the thirty-year period from 1970 to the year 2000, we see that home prices have been steadily rising in Pine Ridge. Economists can examine possible reasons for the rise. It could be the result of inflation, a new business in the area, or perhaps the beauty of the location.

Economists can also compare housing costs neighborhood by neighborhood. This is Twelve Points. The median cost here is $101,500, quite a bit lower than Pine Ridge.

Here is a graph of selling prices for homes in Twelve Points during the same period. We can see that prices started by increasing, then, for some reason, around 1980, began to decline. In this case, it was the year a large manufacturing plant closed, eliminating many jobs in the area.
Economists can also compare the median housing costs for cities. Here are some of the higher cost areas for housing in the United States for 1996:

<table>
<thead>
<tr>
<th>City, State</th>
<th>1996 Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honolulu, HI</td>
<td>335,000</td>
</tr>
<tr>
<td>San Francisco Bay Area, CA</td>
<td>266,400</td>
</tr>
<tr>
<td>Orange County, CA</td>
<td>213,900</td>
</tr>
<tr>
<td>Bergen/Passaic, NJ</td>
<td>199,400</td>
</tr>
<tr>
<td>Boston, MA</td>
<td>189,300</td>
</tr>
<tr>
<td>Los Angeles, CA</td>
<td>172,900</td>
</tr>
<tr>
<td>Seattle, WA</td>
<td>164,600</td>
</tr>
</tbody>
</table>

Here are some of the lower cost areas for the same year:

<table>
<thead>
<tr>
<th>City, State</th>
<th>1996 Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waterloo/Cedar Falls, IA</td>
<td>60,600</td>
</tr>
<tr>
<td>Ocala, FL</td>
<td>63,600</td>
</tr>
<tr>
<td>Saginaw/Bay City/Midland, MI</td>
<td>66,400</td>
</tr>
<tr>
<td>Beaumont/Port Arthur, TX</td>
<td>68,100</td>
</tr>
<tr>
<td>Youngstown/Warren, OH</td>
<td>69,700</td>
</tr>
<tr>
<td>Amarillo, TX</td>
<td>73,700</td>
</tr>
<tr>
<td>Daytona Beach, FL</td>
<td>73,300</td>
</tr>
</tbody>
</table>

(Median Sales Price of Existing Single-Family Homes for Metropolitan Areas)

This would be important information if you were planning to move and hoped to buy a house.

Now that we know something about averages in general, let's look at some of the most important macroeconomic averages, or aggregates.

The sum of the production of goods, and the supply of services in a given country is defined by the country's Gross National Product, or GNP. The direction and rate of change of a country's GNP is considered by economists to be the most important measure of how well a country is doing economically.

Many factors can affect the Gross National Product. Here are five major ones: population expansion or contraction; entrepreneurship-creation of new goods and services; trade; war; natural resources.

Let's examine more closely how these factors affect the Gross National Product.

Population
Population growth in a country can potentially drive up both GNP and per capita GNP. This is particularly true in industrialized countries. However, in more rural countries, population growth, while having a positive impact on GNP, can have a negative impact on per capita GNP. For example, in agriculture there is a limit to how much manual labor can increase production, so that eventually there is less food for each individual. However, by industrializing—using machines to increase production—per capita GNP can rise.

Entrepreneurism
Certainly in the United States, and in other parts of the world, all the inventions associated with computers, and other technological developments have fueled a huge expansion in the GNP.

Trade
Prior to World War II, Japan was an isolated country, but in the postwar period, it opened up and became a huge trading partner for Western countries. As a consequence, its GNP made a large jump.

War
Wars, such as World War II, destroyed much of Europe's economic infrastructure and drove down the GNP of the countries involved. The same is true of recent warring nations, such as Iraq and some central and western African countries. However, for countries like the U.S. and much of Western Europe, which today supply military arms, war can have a positive impact on the GNP.

Natural Resources
The discovery of oil is a classic case of natural resources driving up the GNP of a region such as the Middle East. Similarly, in rain forests around the world, harvesting trees has had a positive impact on the GNP.
It is possible to break down the GNP into more detailed aggregates, called the origin of supply, which can give a better picture of a country's economy. They are: manufacturing; construction; agriculture, fisheries, and natural resources; transportation, communications, and utilities; wholesale and retail; finance, insurance, and real estate; other services.

Manufacturing
Manufacturing includes the production of durable and nondurable goods. It can range from large items like planes and buses, to smaller items like this computer hardware and roller blade wheels. Much of the manufacturing takes place in technologically advanced, industrialized countries. Recently however, some of these countries have begun shifting their manufacturing plants to more cost effective, developing nations, which have traditionally been more centered around small manufactured goods such as these pots.

Construction
Construction is the building of all manner of structures-homes, manufacturing plants, offices, and highways. Construction contributes a large portion to the GNP of industrialized countries.

Agriculture, Fisheries, Natural Resources
This category deals with locating and using the bounty of the earth. Some countries are rich in natural resources and farm land like the United States. Others, like Japan, have a small percentage of their GNP in this category because natural resources are not as abundant. The U.S. percentage is also small, but that is because the other category percentages are so large by comparison. For many developing countries, this is the category of main economic activity.

Transportation, Communication, Utilities
This includes trucking and railroads, television, telephones, computers, and the Internet; also, the generation of power. Economic activity in these areas is sure to play a greater role in the future.

Wholesale and Retail
This includes all the activities involved in the selling of products, both between retailers and consumers, and between manufacturers and retailers.

Finance, Insurance, Real Estate
These are jobs which provide services such as banking, insurance, and the stock market. This is a sector of the economy that has grown as countries industrialize and move into the information age.

Other Services
Other services would include occupations like veterinarians, doctors, dentists, and lawyers. Tourism is another example. In some countries, tourism is the main form of economic activity.

Let's now look at some other aggregates: gross domestic product, aggregate demand, unemployment, inflation and deflation.

Gross Domestic Product
While GNP includes the business done by a country's companies overseas, it excludes business done by foreign countries within its own boundaries. For the Gross Domestic Product, or GDP, the opposite is true.

For example, NeoPlan is a major manufacturer of buses in the United States, but it is owned by a German company. Therefore, its economic activity is not included in the GNP of the U.S., but is included in the GDP. Conversely, when McDonalds opens a restaurant in Germany, the sales are included in America's GNP but not in its GDP. Therefore, many economists now favor GDP as a more accurate measure of the economic activity of a country.

Aggregate Demand
Most adults work and receive a yearly salary. How much of that salary do they spend into the economy through the purchase of food, homes, cars, and other goods and services? The percentage they spend is called the aggregate demand. What else could they do with their income? They could save it in a bank or buy stocks, among other things.

An important economic law states that:
AS INCOME RISES, AGGREGATE DEMAND RISES LESS QUICKLY.
Or, in less industrialized countries where income is low, aggregate demand is high.
Unemployment
This is the percentage of workers in the country, state, or city who are not at work, or, we could say, do not have jobs. Ideally, in the free-market economy, all worker resources would be fully used or exploited. However, we know there are many people who want to work but cannot find jobs. For many, lack of skills or education is an impediment to finding jobs.

In some cases, businesses can fail and people may lose their jobs. Most of the time some kind of job can be found elsewhere in the state or in another part of the country.

However, there have been times when economic failure was more widespread. Due in part to an environmental phenomenon called the dust bowl, in the 1930s, the United States experienced massive unemployment, reaching 25%. This was called a depression. A less severe economic downturn is called a recession.

[Graph] This is a picture of unemployment in the United States for much of the Twentieth Century. Note the high unemployment during the depression of the 1930s. Unemployment dropped rapidly during World War II, leveling off around seven percent.

Inflation and Deflation
The final economic aggregate we will look at is the price of goods and services, and more interestingly, the change of these prices over time.

If economists analyze the price changes over time, like the cost of gasoline, meat, and everything else we buy, some prices will go up and some will go down. On a month-by-month or year-by-year comparison, the change in the overall price of goods and services will either be positive or negative. If the number is positive, it is called inflation, if negative, it is deflation. The amount of change is called the rate of inflation or deflation.

As a rule, prices in the United States and other industrialized countries have gone up over the last fifty years. For instance, a car like this, in the 1950s, would have cost under two thousand dollars. Today, a new car costs at least fifteen thousand dollars. In the 1950s, a new house was around ten thousand dollars. The same house today is around one hundred thousand dollars. Here is a graph of inflation rates in the U.S. since World War II. Notice that there was deflation in 1949 and 1954.

While most items have gone up in price, there are notable exceptions. For example, the cost of personal computers has dramatically decreased since their introduction as the result of advances in technology.

Now that we have seen some of the most important aggregates like GNP, GDP, unemployment and inflation, let's look at some of the tools economists and governments have used in their attempts to control and manipulate economic aggregates.

One of the most powerful tools is called monetary policy.

Since money, all the paper and coins used in a country, is a human invention, it is something that can be controlled. At one time, the value of money equaled the actual worth of the material it was made from, as with gold and silver coins.

Then, as the use of paper money increased, governments held precious metals, like gold, in reserve, equal to the value of the paper money in circulation. This is called the gold standard.

However, in the 1930s, economists understood that a gold or silver standard was not necessary. All that was needed was enough money to cover economic transactions, and a belief by the people that the money was good. Remember, money has always been a human construct.

It was found that during the American Depression of the 1930s, the money supply—the amount of money, coin and paper, that a government puts into circulation—has a strong impact on such economic aggregates as inflation and unemployment. Some economists believe that the single act of making more money available to flow into the economy can stimulate new economic activity, such as housing development and consumer spending.

Also, the central bank, the institution in a country that decides
monetary policy, can affect the variables of an economy by setting interest rates on short-term notes. Banks in turn follow this pattern of setting interest rates for the money they loan to businesses and citizens to finance the purchase of things like new buildings, equipment, cars and houses.

Here we can see the relationship between interest rates, inflation, and unemployment. Notice how they all move together.

Setting interest rates is considered by many economists to be the primary way to control inflation and the rate of the GNP.

Another tool for controlling and manipulating economic aggregates is called fiscal policy. It is the amount of money a government takes in and spends—called the federal budget. Through most of its history, the U.S. government usually had a balanced budget or was in surplus; that is, the amount of money it spent on things like the military, government buildings, and federal employee salaries was equal to or less than the amount of taxes it took in.

But during the Great Depression, and from the 1970s to the present, the government spent much more than it took in. This had the effect of greatly expanding economic activity, hence affecting all the major economic aggregates.

This is called deficit spending, and there is a great debate in countries concerning the consequences of deficits versus surplus budgets.

Most economists believe a certain amount of deficit spending for building infrastructure, like roads, transportation in general, and education, is acceptable to create a positive future, especially if the debt is small in relation to the GNP.

The other two major areas of deficit spending are much more controversial: the military and welfare. Deficit spending for the military is believed by many to be acceptable only during times of war, and broad-based welfare deficit spending only during times of serious economic stress, such as during the Depression. However, in the 20th century, we have seen forms of permanent welfare states in parts of Europe and constant military spending by the United States and the former Soviet Union during the 45-year Cold War.

Another way of impacting economic aggregates is by shifting businesses from the private sector to the public sector or vice versa. For example, prior to the turn of the Twentieth Century, most of the forest lands in the United States were in private ownership. However, because of conservation concerns, the Federal Government, through the Forest Service, took over management of a large part of the lumber resource, particularly reforestation, a move that has kept this part of the economy vital for over one hundred years.

Conversely, at one time, the U.S. mail, run by the government, delivered almost all the letters and packages. Now, there are many private businesses competing to do the same thing.

A final way of affecting economic aggregates is through trade policy. Trade between countries affects employment and the value of the currency of a country. For instance, as shown earlier, after World War II, Japan, through trade, became a huge independent power creating high employment and a large GNP.

So, we have seen that there are many economic aggregates or averages that measure economic activity and behavior and they can show how a city, a region, or a country is doing economically. These aggregates, measured over time, like employment or inflation rates, can be predictors of the future, a future which can be manipulated to some degree by monetary and fiscal policy of governments.
Video Quiz

1. War has a negative impact on the Gross National Product of all countries.
   
   - [ ] True
   - [ ] False

2. All of these people are contributing to:
   
   - [ ] a) inflation in their countries.
   - [ ] b) the Gross National Product in their countries.
   - [ ] c) trade policy of their countries.
   - [ ] d) deflation in their countries.

3. This German company, operating in the United States, is contributing to:
   
   - [ ] a) The United States’ GNP and Germany’s GDP.
   - [ ] b) Germany’s Federal budget.
   - [ ] c) The United States’ GDP and Germany’s GNP.
   - [ ] d) deflation in the United States and inflation in Germany.

4. As discussed in the video, and as shown in this graph, how much of the population of the United States was unemployed during the height of the Great Depression?
   
   - [ ] a) One fifth.
   - [ ] b) One quarter.
   - [ ] c) One twenty-fifth.
   - [ ] d) One third.

5. Monetary policy is:
   
   - [ ] a) determined by corporations.
   - [ ] b) the same as fiscal policy.
   - [ ] c) an aggregate.
   - [ ] d) the government is able to increase or decrease the amount of money in circulation.
ECONOMICS:
A FRAMEWORK FOR TEACHING THE BASIC CONCEPTS
FUNDAMENTAL ECONOMIC CONCEPTS
Viewing Guide

Directions: As you watch the video, fill in the blanks in the following phrases.

1. a) Economics is based on _______________________.
   b) Which can be a function of _______________________.
   c) It can also be a function of _______________________.
   d) In the arena of human economics, societal and individual _______________________. can also play a role.

2. The principle of _______________________. states that if you have more of one thing you must have less of another.

3. Western economies can trace their histories back to the kings and queens of Europe, who ran _______________________.-controlled economies.

4. Through much of the Twentieth Century, the _______________________. economy philosophy vied for world dominance with a new form of _______________________. economy called communism.

5. While at one time individuals did all their own work to survive, over time, as populations increased, a _______________________. took place.

6. The cornerstone of the _______________________. was the invention of the _______________________. line and its use of machines to produce goods and supply services.

7. Division of labor could never work without an acceptable _______________________.

8. Most countries have _______________________. which make sure there is enough money in circulation.

9. The primary entity or institution of the free market, the _______________________. is a legal entity which has as its goal the production of specific goods or services to make a profit.

(Continued on Blackline Master 2)
10. Corporate attorney David Walder explains that starting a corporation is fairly simple. First, we must decide if it is for ___________________ or non-____________________. Then, we draft the articles of ______________________ which include the _______________ of the corporation, the number of shares to be issued, the names of the initial members of the ______________________ _______ ________________, and the registered agent and the registered _________________.

11. There are two major kinds of _______________________ issued by corporations: ______________________ and ______________________.

12. The ______________________ is perhaps the epitome of the free market, where transactions take place exclusively for the purpose of making money.

13. Like flea markets, malls, department stores, and mail order catalogs are all part of an elaborate ______________________ system. To get a product from its point of manufacture to the point of sale there is a large ______________________ network.

14. Once a corporation is created and its purpose defined, its fate will depend on: consumer or ______________________ of its good or service, and profitability in combining the ______________________ _______ ________________ to produce the good or service.

15. The factors of production are: ______________________ ______________________,
____________________, ______________________, and ______________________.
Instructions: Watch the video as the question is asked and a visual is shown, then check the box for the best answer on this worksheet.

1. One requirement for an acceptable medium of exchange is:
   - a) accepted by everyone.
   - b) backed by a reserve of gold or silver.
   - c) not easily destroyed.
   - d) made of gold or silver.

2. Both of these businesses are examples of:
   - a) economic systems.
   - b) marketplaces.
   - c) factors of production.
   - d) capital.

3. Construction of this home utilizes which factors of production?
   - a) Natural resources and labor.
   - b) Capital.
   - c) Other parts.
   - d) All of the above.

4. This business is a corporation, which means that:
   - a) it does business of over $1 million each year.
   - b) it makes a profit.
   - c) it has completed legal paperwork.
   - d) its stock is publicly traded.

5. According to the video, the fate of a corporation depends on:
   - a) market acceptance of its good or service.
   - b) whether it can sell a large number of stocks.
   - c) profitability in combining the factors of production.
   - d) a & c.
ECONOMICS: A FRAMEWORK FOR TEACHING THE BASIC CONCEPTS

FUNDAMENTAL ECONOMIC CONCEPTS

Discussion Questions

Directions: Answer the following questions in preparation for a class discussion. Use the back of this sheet if necessary.

1. What is economics?

2. Define scarcity. Why does it exist?

3. What is the principle of opportunity cost?

4. What four scales of opportunity cost were mentioned in the video?

5. Why are the concepts of scarcity and opportunity cost so important to economics?

6. What are the four factors of production?

7. What is a corporation?

8. What are the steps a business must take to incorporate?

9. What are the two factors which affect the ability of a corporation to survive?

10. What is a centrally-controlled economy? What are the other names for this type of economy, and what examples of these systems did the video provide?

11. What is division of labor, and why is it important in the free market?

12. What is the economic significance of the Industrial Revolution?

13. What are the three factors which make an acceptable medium of exchange?

14. What is the function of countries' central banks?

15. What is the function of local banks?

16. What are marketplaces, and what other system is essential to their success?

17. What determines prices in the market?
1. With scarcity at the base of all material economics, the key operating principle is ____________, which states that: ____________________________
                                           ____________________________.

2. ____________________________ could not happen without an acceptable medium of exchange.

3. Communism is a form of _____________________________. Most economies today are _________
                                           ____________________________ economies.

4. The ____________________________ may be combined in many ways; one company may use a large number of purchased parts, while another may rely heavily on its employees, also known as being _____________________________.

5. The ____________________________ was marked by increasing mechanization, and the development of the ____________________________.

6. ____________________________ are traded freely at a stock exchange.

7. One of the requirements for a successful ____________________________ is _______________ acceptance of its good or service.

8. ____________________________ may be a function of time, geography, or of human values.

   labor intensive  local bank  private stocks
   free-market economy  division of labor  public stocks
   production line  corporation  supply and demand
   command economy  central bank  capital
   barter  market  scarcity
   capital intensive  opportunity cost  Industrial Revolution

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Question: What's the difference between a finance major and an economics major?
Answer: Opportunity cost.

Directions: Fill in the section headings with the four types of opportunity cost discussed in the video. Then, using newspapers, magazines, interviews, personal experience, or other resources, discuss a recent example of each type of opportunity cost. Be sure to state how scarcity influenced the choices made. Go onto the back or use another sheet if necessary.

1 - __________________________

2 - __________________________

3 - __________________________

4 - __________________________
1. EcEdWeb is a student resource linked to economics sites providing international data, personal finance information, government budgets and debts, and more. This site can be used as a starting point for any economics research.

   http://ecedweb.unomaha.edu/econinfo.htm

2. There has recently been discussion that since populations are increasing and resources are decreasing, businesses should move from being capital, or resource, intensive to being labor intensive. Examples of this idea would be the family farm versus the factory farm, and timber farming instead of cutting old growth. At the same time, the business trend has been toward using capital more intensively in hopes of increasing worker productivity. Explore these ideas and decide what you believe. Write a short essay defending your point of view. Some sites that may be useful are as follows:

   http://www.rmi.org
   http://lisd1.lisd.ca/

3. Using a search engine, do a search on vocabulary words from the list of key terms. If more than one student searches for the same word, how many different sites can you come up with that provide interesting information? To where do your searches lead?

4. The central banks of many countries are available on-line. Most have a section devoted to explaining their functions and how those are carried out, as well as sections discussing the amount of money in circulation. These sites have data about central bank functions well beyond what is in the video, however you can pick out useful information from them. A couple of sites are as follows. Search for others, but look out for local banks that have "central bank" in their names.

   http://www.centralbank.gov.cy/ Central Bank of Cyprus
   http://ipod2.bot.or.th/ Central Bank of Thailand
   www.bog.frb.fed.us United States Federal Reserve Bank

5. There are dozens of different stock markets, and most of those are now on-line. Look in more depth at the buying and selling of public corporate stocks at sites like the New York Stock Exchange's.

   http://www.nyse.com
1. How did the video define "economics?"

2. Define "opportunity cost." Be sure to mention why it exists.

3. What are the four levels of opportunity cost?

4. A corporation cannot survive without what two factors?

5. Name the four factors of production and give an example of each.

6. What are the three factors which make an acceptable medium of exchange?

7. Two types of banks were discussed in the video. Name each and explain its function.

8. What are marketplaces in the language of economics?

9. What determines prices in the market?
ECONOMICS:
A FRAMEWORK FOR TEACHING THE BASIC CONCEPTS
UNIT OF STUDY TEST

Instructions: Follow the instructions within each question. When providing definitions, make sure you utilize other key vocabulary words.

1. a) Name two of the types of market failures discussed in the unit.

   b) Name the three tools governments have to correct market failures.

2. Find the median ____________ and the average ____________ of the following set of numbers. Use the back of the test, or another sheet, if needed.

   6 14 17 22 31 34 36 42 60 84 107 115

3. Define opportunity cost and list the four levels at which it operates.

4. Define aggregate demand.

5. Name the four factors of production.

6. a) Explain the difference between the Gross National Product (GNP) and the Gross Domestic Product (GDP).

   b) Name the five factors that affect the GNP and the GDP.
7. Name and describe the functions of the two types of banks discussed in the unit.

8. a) In the __________________ economy, ______________ is the control mechanism that prevents large surpluses or shortages of goods, services, or labor.

   An increase or decrease in consumer or market ______________ for items affects both the cost and the quantities in which producers ______________ the items.

   b) Describe how the previous statements (8 a) work. Use an example.


10. List the seven prime categories of origin of supply.

11. Draw and label the diagram of microeconomic flows.