This poster kit presents statistics on the gross national product (GNP) per capita from 120 countries with populations of more than one million. Third in a series of kits designed to promote understanding of the process of economic and social development, especially in low- and middle-income countries, this kit contains a poster map of the world, six photographs with text, and a teaching guide designed for use in secondary schools. The map is color-coded to convey varying levels of GNP per capita among the countries of the world. The map also includes three charts: Chart 1--GNP, Populations and GNP per Capita; Chart 2--Growth of GNP per Capita, GNP, and Population 1965-80 and 1980-87; and Chart 3--Income Distribution for Selected Countries. Six photographs and accompanying texts discuss the topics: (1) education and training; (2) industry; (3) agriculture; (4) trade; (5) infrastructure; and (6) health services. The teaching guide contains 11 worksheets, a vocabulary list, a data table, a test (with answers), and an outline map.
MEASURES OF PROGRESS

TEACHING GUIDE

GNP per Capita

Poster Kit Number 3

The World Bank
Washington, D.C.
Introduction

This poster kit presents statistics on gross national product (GNP) per capita from 120 countries with populations of more than 1 million. It is the third in a series of poster kits entitled Measures of Progress. The series, published by the World Bank, is designed to promote understanding of the process of economic and social development, especially in low- and middle-income countries. Other kits in the series examine life expectancy at birth and population growth. Each poster kit contains a color poster map of the world, six color photographs with texts, and a teaching guide designed for use in secondary schools.

Basic concepts

- The goal of economic development is to raise standards of living in low- and middle-income countries (also called developing countries), so people there can live better, fuller lives. In the past three decades, these countries have made enormous progress, but much remains to be done.
- Many factors contribute to economic development, including the abundance of a country's resources, its access to other resources through trade, and the state of the global economy.
- GNP per capita shows the part of GNP each person would have if GNP were divided equally. In fact, in many countries the richest 20 percent of the population get much more than the poorest 20 percent.
- GNP per capita tends to be much lower in developing countries (low- and middle-income countries) than in high-income countries. Average GNP per capita in high-income countries ($14,430) is eight times greater than in middle-income countries ($1,810) and 50 times greater than in low-income countries ($290).
- GNP has grown fast in developing countries, but so has population; as a result, the growth of GNP per capita has been moderate.
- More than half of the world's population (2.8 billion people) lives in low-income countries, and more than half of these countries are in Sub-Saharan Africa. (Note, however, that more than 80 percent of the residents of low-income countries live in Asia, most of them in China and India.)

Teaching goals and objectives

As a result of using this poster kit, students should be able to:
- read and interpret data about GNP per capita on maps, graphs, and charts
- explain the relation between GNP per capita and population growth rate
- explain some of the factors that can increase GNP per capita
• discuss what GNP per capita cannot tell you about a country.
A test to measure the achievement of these goals and objectives begins on page 23.

Technical notes

Data and maps. Because the World Bank is continuously updating its data, some of the figures in this kit differ from other World Bank data. In the teaching guide the Data Table is based on the World Bank's World Development Report 1989 (New York: Oxford University Press). Maps are based on the Eckert IV equal-area projection, which maintains correct areas for all countries, but somewhat distorts shape, distance, and direction.

Country groups. The World Bank groups countries by regions and by GNP per capita. The country groups are:
• High-income countries: 25 countries with a GNP per capita of $6,000 or more in 1987. Industrial countries (members of the Organisation for Economic Co-operation and Development plus Spain) account for 19 of these countries: Australia, Austria, Belgium, Canada, Denmark, the Federal Republic of Germany, Finland, France, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, the United Kingdom, and the United States. The remaining six economies—Hong Kong, Israel, Kuwait, Saudi Arabia, Singapore, and the United Arab Emirates—have high GNPs per capita but are not necessarily at the same level of economic development as industrial countries. The total population of these 25 countries is almost 0.8 billion.
• Developing countries: 42 low-income countries (those with a GNP per capita of $480 or less in 1987) with a population of 2.8 billion and 53 middle-income countries (those with a GNP per capita of more than $480 but less than $6,000 in 1987) with a population of 1.1 billion. Total population for these 95 countries is 3.9 billion. All countries are developing in one way or another: most people in low-income countries, however, and many people in middle-income countries, are unable to get all the goods and services they need.
• Nonreporting nonmember countries: 10 economies that are not members of the World Bank and do not report economic data to the Bank: Albania, Angola, Bulgaria, Cuba, Czechoslovakia, the German Democratic Republic, the Democratic People's Republic of Korea, Mongolia, Namibia, and the Union of Soviet Socialist Republics. Their population, along with that of countries with populations of less than 1 million, is 0.4 billion.

The classifications by region used in this poster kit are shown in the Data Table. The six regions are: (1) North and Central America and the Caribbean, (2) South America, (3) Europe, (4) the Middle East and North Africa, (5) Sub-Saharan Africa, and (6) Asia and the Pacific.

About statistics

Statistics can be powerful tools for understanding economic development, but they have limitations. Statistics can be based on counting, estimates, or other statistics. They are more accurate for some countries than for others. And because it takes a long time to collect and verify some statistics, they may be out of date even before they are published. The statistics in this poster kit are the most recent ones available at the time of publication.

Many aspects of economic development cannot be measured by statistics. Examples are the attitudes and feelings of people, their values and ideas, their social and political systems, and their history and culture. So, although statistics can tell much about economic development, there is much they do not tell. This kit thus tells only part of the story of economic development, but it is an important part.

What is the World Bank?
The World Bank is an international institution owned by 151 countries. Its work is to help its developing member countries improve the living conditions of their people. It does this by lending them money for development projects and for structural and sectoral adjustment and by providing various kinds of technical assistance. Its loans have longer repayment periods than commercial bank loans. The International Development Association, which is part of the World Bank, makes interest-free loans for even longer periods to the Bank's poorest member countries. The World Bank began operations in 1946; the International Development Association was founded in 1960. Their loans to developing countries now amount to about $21 billion a year.

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Vocabulary

**Billion.** One billion equals 1,000 million.

**Capital.** The money or wealth needed to produce goods and services. See also *human capital* and *physical capital*.

**Comparative advantage.** The resources a country has that other countries may lack—for example, mineral deposits, good rainfall, rich farmland, well-trained workers, or favorable government policies.

**Cooperative.** A business or organization owned by and operated for its members. It allows people to do as a group what they would be unable to do alone. For example, in a dairy cooperative each farmer contributes money so that together they can buy the expensive equipment needed to store and transport the milk from their farms. Together they own the cooperative and share its expenses and profits.

**Debt.** The amount of money a government owes to banks, businesses, other governments, and international institutions. The country must use its wealth to pay back these loans and thus has less money to spend on the goods and services it needs to help its economy grow. Many developing countries borrowed a lot of money, largely from commercial banks, in the 1970s, when interest was low. Now, because of changes in interest rates and the value of the dollar, it is difficult for countries to repay these loans.

**Developing countries.** Low- and middle-income countries in which most people have a low standard of living with few goods and services. There are 95 developing countries; their population is about 3.9 billion. As a group, they are sometimes called the Third World or the South.

**Domestic.** Something that comes from within your own country and is not imported from another country.

**Economic growth.** The process by which a country increases its ability to produce goods and services.

**Export.** To sell goods or services to a buyer outside your country.

**Family planning.** A health service that helps people decide whether to have children, and, if so, when and how many.

**Foreign exchange.** Currency or money—generally U.S. dollars—that one country uses to pay for the goods and services it buys from another country.

**GDP (gross domestic product).** The dollar value of a country’s final output of goods and services produced within that country in a year (in other words, *gross domestic product*) plus income that residents received from abroad.

**GNP (gross national product).** The dollar value of a country’s final output of goods and services in a year (its GNP) divided by its population. It reflects the value of a country’s economic activity and the income of its people. It does not show what is being produced, whether all people share equally in the income of a country, or whether they lead fulfilling lives. Data are compiled in the currency of each country and converted to values in U.S. dollars, taking into account changes in exchange rates and inflation, to make comparisons possible.

**GNP per capita.** The dollar value of a country’s final output of goods and services in a year (its GNP) divided by its population. The change in GNP per capita over a period, expressed as a percentage of GNP per capita at the start of the period. Average annual growth rates for a period of years provide a better picture of economic development in a country than does the growth rate for a single year.

**Goods and services.** Things that are produced by a country’s economy. Examples of goods include food, clothing, machines, and new roads. Examples of services include those of doctors, teachers, merchants, tourism agents, and government officials.

**High-income country.** A country whose GNP per capita is $6,000 or more. There are 25 high-income countries, including 19 industrial countries and six countries whose GNP per capita is high but whose economies are not yet fully industrialized. Their total population is 0.8 billion.

**Human capital.** People and their ability to be economically productive. Education, training, and health care can help increase human capital. See also *capital* and *physical capital*.

**Import.** To buy goods and services from another country.

**Industrial country.** A high-income country where most people have a high standard of living with many goods and services. There are 19 industrial countries; their population is almost 0.8 billion. They are also known as developed countries or as a group, the North.

**Infrastructure.** The physical structures that a country needs to function, including roads, houses, buildings, bridges, railways, dams, telecommunications systems, and water supply sanitation systems.

**Investment.** Money spent now in order to make the economy grow and have more money—or goods and services—later.

**Labor force.** The supply of workers—both men and women—available in a country.

**Labor-intensive.** Requiring many workers and few machines.
Life expectancy. The average number of years a newborn child can be expected to live if health conditions remain the same.

Literacy. The ability to read and write a simple letter and do simple mathematical calculations.

Low-income country. A country with a GNP per capita of $480 or less, in which most people have a low standard of living and cannot meet their basic needs. There are 42 low-income countries; their population is 2.8 billion.

Manufactured products. Goods—for example, shoes, trucks, radios, electric motors, or canned fruit—that are produced from raw materials by hand or by machine.

Middle-income country. A country with a GNP per capita of more than $480 but less than $6,000, in which many people have a low standard of living with few goods and services. There are 53 middle-income countries; their population is 1.1 billion.

Physical capital. Things, such as machinery, tools, equipment, parts, and buildings, that are needed to produce goods and services. See also capital and human capital.

Population growth rate. The increase in a country’s population during a period of time, usually one year, expressed as a percentage of the population at the start of that period. It reflects the number of births and deaths during the period and the number of people moving to and from a country. World population is slightly over 5 billion.

Primary products. Goods—for example, iron ore, diamonds, wheat, copper, oil, or coffee—that are used or sold as they are found in nature. They are also called primary commodities.

Resources. The machines, workers, money, land, and raw materials that a country can use to produce goods and services and to make its economy grow.

Terms of trade. The ratio of export prices to import prices, or what a country earns from its exports relative to what it pays for its imports. For example, a country’s terms of trade are worsening if one year that country exports four tons of coffee to earn the foreign exchange needed to import a tractor but the next year the country must export five tons of coffee to buy the same kind of tractor.

Value added. The value that is added to the price of goods because of the time, money, and skill used to produce them.
Worksheet 1: Vocabulary matching

Fill in the correct term in the sentences below. Note that there is one more term than needed.

- high-income country
- low-income country
- primary products
- cooperative
- foreign exchange
- labor-intensive
- export
- human capital
- comparative advantage
- import
- physical capital
- value added
- GNP per capita
- population growth rate
- terms of trade
- goods and services

1. Factory workers are part of a country's supply of ____________________________.

2. A country with a GNP per capita of $11,500 is a ____________________________.

3. A country needs ____________________________ to pay for its imports and to pay back its foreign loans.

4. The coffee growers in Colombia decided to band together to form a ____________________________ so they could harvest, store, and market their crops more efficiently.

5. In order to increase their GNP per capita, many countries are trying to decrease their ____________________________.

6. If a country gets higher prices for its exports while the prices of its imports fall, the country's ____________________________ have improved.

7. If a country does not grow enough food to feed all its people, it must ____________________________ food from other countries.

8. A low-income country with a large number of workers wants to develop industries that are ____________________________.

9. In a factory, the machines, tools, telephones, furniture, and the building itself are examples of ____________________________, which is needed to produce goods.

10. If a country's economy grows, it means people may have access to more ____________________________, such as food, clothes, and medical care.

11. A country with a GNP per capita of $320 is a ____________________________.

12. A country's _____ ____________________________ _____ gives an idea of how much the average person earns.

13. If Country A can produce radios more cheaply than Country B, Country A has a ____________________________ in the radio market.

14. A country that wants to earn foreign exchange must ____________________________ it: goods and services.

15. Many developing countries export agricultural crops, minerals, and other ____________________________.

Worksheet 2: Understanding the poster map

1. According to the key to the right of the world map, what color indicates a low GNP per capita? a high GNP per capita?

2. How would you classify a country with a GNP per capita of $8,220? a country with a GNP per capita of $310? a country with a GNP per capita of $4,845?

3. Calculate GNP per capita for Countries A, B, and C, using the following formula. Round your answers to the nearest whole number.

\[
\text{GNP per capita} = \frac{\text{GNP}}{\text{Population}}
\]

<table>
<thead>
<tr>
<th></th>
<th>GNP</th>
<th>Population</th>
<th>GNP per capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country A</td>
<td>$18,200,000,000</td>
<td>190,400,000</td>
<td></td>
</tr>
<tr>
<td>Country B</td>
<td>$400,100,000,000</td>
<td>1,500,000,000</td>
<td></td>
</tr>
<tr>
<td>Country C</td>
<td>$1,600,300,000,000</td>
<td>170,200,000</td>
<td></td>
</tr>
</tbody>
</table>

4. Look at exercise 3 above. Country A's population is similar to Country C's population. How do you explain the difference between the GNP per capita of these two countries?

5. On which continent(s) do you tend to find countries with low GNP per capita?

6. On which continent(s) do you tend to find countries with high GNP per capita?
7. Using the poster map, list three countries for each of the following categories of GNP per capita. Next to each country write the continent on which it is located.

<table>
<thead>
<tr>
<th>$480 and less</th>
<th>$481 through $5,999</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>$6,000 and more</td>
<td>Data not available</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Read in the Vocabulary about goods and services. Put a G next to the items in this list that would be counted in a country’s GNP as goods. Put an S next to the items that would be counted as services. Put an N next to the items that would not be counted.

<table>
<thead>
<tr>
<th>G</th>
<th>S</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>___ missiles</td>
<td>___ newspaper</td>
<td>___ doctors’ fees</td>
</tr>
<tr>
<td>___ car wash</td>
<td>___ fast food</td>
<td>___ housework you do yourself</td>
</tr>
<tr>
<td>___ workers’ salaries</td>
<td>___ postal delivery</td>
<td>___ shoes</td>
</tr>
<tr>
<td>___ food you cook at home</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Worksheet 3: Understanding Chart 1

GNP, Population, and GNP per Capita

GNI per capita is low in developing countries. They produce less than a fifth as many goods and services as high-income countries but have five times as many people. The chart shows GNP and population for both groups of countries in 1987. It also shows GNP per capita, or the part of GNP each person would have if GNP were divided equally. GNP per capita helps measure the material output of a country, but it does not show what is produced, how equally the income from this production is shared by all the people, or whether these people lead fulfilling lives.

To increase GNP per capita, all countries are trying to produce more goods and services; that is, they are trying to make their economies grow. Economic growth depends on many factors: improving transportation, communication, and energy systems, providing better tools and technology, giving a fair price for goods and services, encouraging savings and investment, increasing the value and variety of exports, and having better access to world markets to sell exports. Economic growth also depends on providing people with the opportunity to participate in and benefit from the economy. This means helping both men and women be more productive by improving their health, education, and work skills. In addition, many countries are trying to slow their population growth, which can also help increase GNP per capita.

1. What two groups of countries are being compared in Chart 1?

2. What three kinds of information does the chart give?

3. a. If a country's GNP is small but its population is large, is its GNP per capita high or low? How does this affect the standard of living?

b. On which continents on the poster map are there many countries in this situation?

c. If a country's GNP is large but its population is small, is its GNP per capita high or low? How does this affect the standard of living?

d. On which continents on the poster map are there countries in this situation?

4. Of all the goods and services produced in the world, what share do developing countries produce? What share do high-income countries produce?

5. What are three things that GNP per capita does not tell you about a country's economy and people?
6. Study the 1987 population table below and answer the questions. Then fill in the table based on your answers.

<table>
<thead>
<tr>
<th>Population (billions)</th>
<th>Percentage of world population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-income countries</td>
<td>2.8</td>
</tr>
<tr>
<td>Middle-income countries</td>
<td>1.1</td>
</tr>
<tr>
<td>High-income countries</td>
<td>0.8</td>
</tr>
<tr>
<td>Other countries*</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5.3</strong></td>
</tr>
</tbody>
</table>

* Includes countries that are not members of the World Bank and countries with populations of less than 1 million.

a. What is total world population? ____________________________________

b. How many of these people live in developing countries? ______________________

c. What percentage is this of world population? __________ Use the following formula. Round your answer to the nearest whole number.

\[
\text{Percentage} = \left( \frac{\text{Group population}}{\text{World population}} \right) \times 100
\]

d. How many people live in high-income countries? ______________________

e. What percentage is this of world population? __________ (Use the same formula as in exercise 6c. Round your answer.)

f. How many times more people live in developing countries than in high-income countries? ______________________. (Divide the total population of low- and middle-income countries by the population of high-income countries. Round your answer to the nearest whole number.)

g. How many people live in the country group marked “Other”? ______________________

h. What percentage is this of world population? __________ (Use the same formula as in exercise 6c. Round your answer to the nearest whole number.)

7. Name four things countries can do to help their economies grow.

8. What happens to a country’s GNP per capita if its GNP:
   a. stays the same and its population decreases? ______________________
   b. stays the same and its population increases? ______________________
   c. increases at the same rate as its population? ______________________

9. In your opinion, what do people need to lead fulfilling lives?
Worksheet 4: Understanding Chart 2

Growth of GNP per Capita, GNP, and Population, 1965-80 and 1980-87

The chart shows that between 1965 and 1980 GNP per capita grew faster in developing countries than in high-income countries. In 1980-87, however, the growth of GNP per capita slowed in both groups of countries. The chart also shows how rapid growth in the GNP of developing countries has been offset by population growth in both time periods.

1. In 1965-80, did GNP per capita in developing countries grow faster than, more slowly than, or at the same rate as in high-income countries? What about in 1980-87?

2. In 1965-80, which group of countries had the highest growth rates in GNP? in population? What about in 1980-87?

3. In 1965-80, GNP in developing countries grew at a rapid 6.0 percent a year. Why did GNP per capita in these countries not increase more?

4. Using the information in Chart 2 for 1980-87, fill in the table as accurately as possible.

<table>
<thead>
<tr>
<th></th>
<th>GNP per capita growth rate (percent)</th>
<th>GNP growth rate (percent)</th>
<th>Population growth rate (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing countries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High-income countries</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Calculate the annual growth rate of GNP per capita for Countries A and B, using this formula:

\[
\text{Annual GNP per capita growth rate} = \frac{\frac{\text{Change in GNP per capita during the year}}{} + \text{GNP per capita at the start of the year}}{\text{GNP per capita at the start of the year}} \times 100
\]

Round your answers to the nearest tenth of a percent. Use your answers to fill in the table.

<table>
<thead>
<tr>
<th>Country</th>
<th>GNP per capita at the start of the year</th>
<th>GNP per capita at the end of the year</th>
<th>Change in GNP per capita during the year</th>
<th>Annual GNP per capita growth rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country A</td>
<td>$230</td>
<td>$240</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country B</td>
<td>$3,900</td>
<td>$4,022</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Continued on next page
6. Chart 2 shows that the rate of growth of GNP per capita in developing countries is equal to or greater than the rate in high-income countries. But, despite this good rate, Chart 1 shows that the actual quantity of GNP per capita is much lower, in fact five times lower. This means that although economies of developing countries are performing well, they still have a very long way to go.

Many types of activities can help a low-income country's economy grow, but the government does not have enough money to do everything. Assume that you are one of the following people:

- the leader of the Farmers Association
- the minister of planning
- the head of the Urban Citizens Association
- a private investor who wants to make money.

In the role you have chosen, number the activities below in the order in which you would undertake them, starting with the most important. On a separate sheet of paper, explain your choices.

1. Build and equip a modern hospital in the capital city.
2. Cut down 20 percent of the country's forests in order to sell the lumber and open up new land for farmers.
3. Build 10 grain elevators in the countryside to store wheat until it is shipped to market.
4. Buy tanks, airplanes, and guns to help protect your country from neighboring countries that may be hostile.
5. Increase the wages of factory workers and the prices paid to farmers for their products.
6. Hire and train 25 high school graduates to travel to villages and teach farmers how to use fertilizer to increase crop yields.
7. Build a railway between the agricultural region and the capital city.
8. Construct five new schools and hire 20 new teachers for the slums surrounding the three largest cities.
9. Start a factory to build electric motors in the capital city and train city dwellers as workers.
10. Build a hydroelectric dam on the country's principal river to create more energy and reduce oil imports.
Worksheet 5: Understanding Chart 3

Income Distribution for Selected Countries

To begin to understand what life is like in a country, it is not enough to know how much income that country generates. You must also know how equitably that income is distributed, which can vary widely from country to country. For example, the chart shows that in India, a low-income country, the poorest 20 percent of the population earn 7.0 percent of the income, while the richest 20 percent earn seven times more (49.4 percent). In Côte d'Ivoire, a middle-income country, the poorest 20 percent earn 2.4 percent of the income, whereas the richest 20 percent earn 25 times more (61.4 percent). In Canada, a high-income country, the poorest 20 percent earn 5.3 percent of the income, and the richest 20 percent earn seven and a half times more (40.0 percent).

1. What do you need to know about a country’s GNP per capita to get an idea of what life is like in that country?

2. Which of the three countries in the chart has the greatest difference between the incomes of the richest and poorest people? _____________ the least difference? _____________

3. a. In each country what percentage of income goes to the "middle class"—that is, the people in the second, third, and fourth groups?

   b. In which country does the middle class get the largest share of income? _____________

4. Use the Data Table to find the GNP per capita for India, Côte d'Ivoire, and Canada. Given the GNP per capita and how it is distributed, in which of these three countries would you rather live if you were in the poorest 20 percent? Explain your choice.

5. You are the minister of economics in a low-income country. You want as many people in your country as possible to be productive, so the economy will grow as fast as possible. Number the activities below in the order in which you would undertake them, starting with the most important. On a separate sheet of paper, explain your choices.

   ____ Increase factory wages.
   ____ Increase prices paid to farmers for their products.
   ____ Increase the number of children who finish primary school.
   ____ Ensure that as many farmers as possible own their own land or have secure access to land.
   ____ Make more loans available to people living in the cities so they can build their own houses.
   ____ Ensure that all people have a cheap supply of clean water and electricity.
   ____ Have a tax system that charges rich people more than poor.
Worksheet 6: True or false statements

Answer each statement True or False. Make the false statements true by changing the underlined words or phrases.

1. Developing countries have more people but produce fewer goods and services than high-income countries.
2. Most countries with low GNP per capita are in South America.
3. Country Y exported its coffee for $1.08 a pound in 1988 and for $1.00 a pound in 1989. At the same time, the price of the goods it imported went up. As a result, Country Y's terms of trade have gotten worse.
4. In 1965–87 in developing countries, both GNP and population grew fast.
5. India is a middle-income country.
6. In 1965–87, population grew more slowly in developing countries than in high-income countries.
7. If you clean your house it is not counted in your country's GNP, but if you pay a maid to do the same work it is counted.
8. In 1980–87, GNP per capita in developing countries grew at the same rate as in high-income countries.
9. GNP per capita does not tell you what a country produces or whether income is distributed equally.
10. In Canada the richest 20 percent of the population earn twice as much income as the poorest 20 percent.
11. One way for a country to increase its GNP per capita is to slow down its population growth.
12. GNP per capita measures how much income a person would have if GNP were divided equally.
13. A continent with low GNP per capita is North America.
14. Country A produces and exports rubber. The country also manufactures rubber tires, which it sells for more than the rubber itself.
Worksheet 7: Exploring the photographs

These photographs are from development projects in developing countries. They represent the kinds of activities that help increase a country's GNP per capita and improve the standard of living. These activities can be divided into six sectors: Education and Training, Industry, Agriculture, Trade, Infrastructure, and Health Services.

1. Look at your photograph. Describe what you see.

2. What do you think is going on in the photograph?

3. Which one of the six sectors of activity do you think the photograph represents?

4. Could your picture also represent another sector? If so, which one(s) and why?

5. Now read the text on the back of the photograph and answer these questions.
   a. What sector does your photograph actually represent?
   b. What is really going on in the picture?
   c. Where was the picture taken?
   d. Find the country on the poster map. What continent is it on?
   e. Is it a low- or middle-income country? How does its income compare with that of its neighboring countries? with that of your country?

6. How might this kind of activity help to increase GNP per capita? to improve living standards?

7. What, if any, aspects of the project might also help improve living standards in industrial countries?

8. Read the text again. Outline the main problems or questions discussed in the text and their possible solutions.

9. Using your outline, take five to 10 minutes to teach the rest of the class about your photograph. Ask the class to help find answers to the problems and questions raised in the text. (If the discussion raises new questions that you are unable to answer, write the questions down, research the answers, then report back to the class.)

10. After all of the pictures have been discussed, identify six activities that developing countries can engage in to help increase their GNP per capita.
Worksheet 8: Using the Data Table

1. Use the Data Table to fill in these tables.
   a. List the seven countries with the lowest GNP per capita in 1987, starting with the lowest. (Hint: All of them are less than $200.)

<table>
<thead>
<tr>
<th>Country</th>
<th>GNP per capita</th>
<th>GNP per capita growth rate (percent)</th>
<th>Geographic region</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
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<td>6.</td>
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<td>7.</td>
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</tbody>
</table>

b. List the seven middle-income countries with GNP per capita of $1,890 through $2,390 in 1987, starting with the lowest.

<table>
<thead>
<tr>
<th>Country</th>
<th>GNP per capita</th>
<th>GNP per capita growth rate (percent)</th>
<th>Geographic region</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
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<tr>
<td>2.</td>
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<td>3.</td>
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<td>4.</td>
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<td>5.</td>
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<td>6.</td>
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<td></td>
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<tr>
<td>7.</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
c. List the seven countries with the highest GNP per capita in 1987, starting with the lowest. (*Hint: All of them are more than $15,000.*)

<table>
<thead>
<tr>
<th>Country</th>
<th>GNP per capita</th>
<th>GNP per capita growth rate (percent)</th>
<th>Geographic region</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2.</td>
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<td></td>
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<tr>
<td>3.</td>
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<td>4.</td>
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<td>5.</td>
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<tr>
<td>6.</td>
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<td></td>
<td></td>
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<tr>
<td>7.</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

2. a. In which geographic regions do the low-income countries in exercise 1a tend to be located? the high-income countries in exercise 1c?

b. How do the GNPs per capita of these two groups of countries compare?

3. a. Which one of the low-income countries in exercise 1a has the highest GNP per capita growth rate? __________________ the lowest? __________________

b. Which one of the middle-income countries in exercise 1b has the highest GNP per capita growth rate? __________________ the lowest? __________________

c. Which one of the high-income countries in exercise 1c has the highest GNP per capita growth rate? __________________ the lowest? ___________
Worksheet 9: Comparing social and economic indicators

1. Fill in these tables using the Data Table.

<table>
<thead>
<tr>
<th>Group A</th>
<th></th>
<th>Group B</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Life expectancy at birth, 1987 (years)</td>
<td>GNP per capita, 1987</td>
<td>Life expectancy at birth, 1987 (years)</td>
</tr>
<tr>
<td>India</td>
<td>58</td>
<td></td>
<td>Brazil</td>
</tr>
<tr>
<td>Mauritania</td>
<td>46</td>
<td></td>
<td>China</td>
</tr>
<tr>
<td>Niger</td>
<td>45</td>
<td></td>
<td>Dominican Republic</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>41</td>
<td></td>
<td>Mexico</td>
</tr>
<tr>
<td>Uganda</td>
<td>48</td>
<td></td>
<td>Paraguay</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group C</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Life expectancy at birth, 1987 (years)</td>
</tr>
<tr>
<td>Australia</td>
<td>76</td>
</tr>
<tr>
<td>France</td>
<td>77</td>
</tr>
<tr>
<td>Italy</td>
<td>77</td>
</tr>
<tr>
<td>Japan</td>
<td>78</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>63</td>
</tr>
</tbody>
</table>

a. How would you label each group of countries based on its GNP per capita?

b. In one or two sentences, describe life expectancy in each group of countries.

c. What relation, if any, do you see between life expectancy and GNP per capita based on the data for these three groups of countries?

2. Describe three factors you have studied that could lead to an increase in both life expectancy and GNP per capita.
Worksheet 10: Looking at aggregate data

Aggregate data are data that describe groups of countries. Study the table below, then answer the questions.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-income countries</td>
<td>$290</td>
<td>3.1%</td>
<td>2.8</td>
<td>2.0%</td>
<td>61</td>
</tr>
<tr>
<td>Middle-income countries</td>
<td>$1,810</td>
<td>2.5%</td>
<td>1.1</td>
<td>2.2%</td>
<td>65</td>
</tr>
<tr>
<td>High-income countries</td>
<td>$14,430</td>
<td>2.3%</td>
<td>0.8</td>
<td>0.7%</td>
<td>76</td>
</tr>
</tbody>
</table>

1. What are the three groups of countries?

2. Which group has the lowest GNP per capita? the highest?

3. In which group do the most people live? the fewest people?

4. In which group is life expectancy the lowest? the highest?

5. In which group did GNP per capita grow the fastest in 1965-87? the slowest?

6. In which group is the population growing the fastest? the slowest?

7. How many times more money does the average person earn in a high-income country than in a low-income country? Use this formula:

   \[
   \text{High-income GNP per capita} \div \text{Low-income GNP per capita}
   \]

   Round your answer to the nearest whole number.

8. Using the data in this table, write one or two sentences in which you compare developing countries with high-income countries.
Worksheet 11: What would you do?

These activities will help you explore in greater depth some of the issues of development introduced in the photograph texts. You may modify the list of solutions or devise your own, but you should always give reasons for your answers. You can choose to play one of the following roles, or you may define a role of your own:

- minister of economics and planning
- minister of health, education, and welfare
- head of the Urban Citizens Association
- private investor who wants to make a profit.
- leader of the Rural Citizens Coalition

Photo 1. Education and Training

The president of your country wants to reduce the national budget and has given you a list of options. What would you recommend? Defend your decision.

- Reduce by 40 percent the number of adult education classes throughout the country.
- Cancel plans to build and staff three new secondary schools in the capital city.
- Charge university students tuition (traditionally, they have received full scholarships).
- Cut in half the number of new primary schools to be built and staffed in rural areas.

Photo 2. Industry

The three goals of your country’s new industrialization policy are listed below. Your job is to rank them in importance and decide what percentage of the nation’s budget will be used for each. What would you do? Explain your decision.

- Produce weapons so that you can defend your country from neighboring countries that may be unfriendly.
- Build and equip schools and hospitals throughout the country so that all children will have access to education and health care.
- Link the entire country by a system of roads, railways, and telephones so that business and trade can grow.

Photo 3. Agriculture

In your country, 30 percent of the population lives in the two largest cities, and the number is growing rapidly. All these people concentrated together have a lot of political power, so the president of the country wants to keep them satisfied. One way this has been done is by keeping food prices low, especially for bread. But now farmers in the countryside are unhappy because they cannot sell their wheat for enough money to support their families. In fact, many of them have stopped growing wheat completely, so now the country must buy expensive imported wheat in order to produce enough bread for everyone. The country cannot continue doing this because it is seriously hurting the economy. The Council of Economic Advisers has prepared a list of possible actions to take. Which would you recommend to the president? Defend your decision.

- Raise the price of bread as well as the price farmers are paid for their wheat.
- Increase taxes to pay for imported wheat.
- Borrow money to pay for imported wheat.
- Reduce taxes for farmers.

Continued on next page
Worksheet 11 (continued)

**Photo 4. Trade**

You live in a middle-income country that exports lumber. The president has outlined several strategies that will help the country make more money and thus be able to buy more of the imports the economy needs to grow. What strategies would you support? Defend your decision.

- Export more lumber.
- Manufacture and sell products made from wood, such as paper, furniture, and flooring materials.
- Join with other wood-exporting countries and try to limit the amount of wood for sale and thus push its price up.
- Borrow money, then pay it back when the economy grows.
- Plant seedlings so that lumber will be plentiful in the future.

**Photo 5. Infrastructure**

1. You live in a middle-income country with a population of 31 million people. The president wants to build a hydroelectric dam on the country's largest river so the country can produce its own energy and not rely on expensive imported oil. Building the dam, however, means flooding thousands of acres of forest and farmland; it also means moving 1 million people from their homes and relocating them throughout the country. Planning experts have suggested several ways to deal with the situation. What would you recommend? Defend your decision.

- Continue to use imported oil and try to develop other sources of energy, for example, coal, natural gas, or nuclear energy.
- Set up a planning commission that includes energy experts, civil engineers, environmentalists, agricultural experts, social workers, and leaders from the towns and villages that will be affected.
- Start the project immediately and finish quickly in order to disrupt life as little as possible.
- Have a special nationwide referendum—or vote—to see whether citizens want the dam.

2. You live in a low-income country with a population of 32 million, 18 percent of whom live in urban areas. The president of the country wants to develop a network of paved roads. But the budget is limited, so the president must decide who will get paved roads now and who will have to wait. What would you recommend that the president do? Defend your decision.

- Build two-lane roads that connect villages with their regional market towns.
- Build a four-lane road from the capital to the president's hometown.
- Build local single-lane roads that connect villages with each other and with their nearest market towns.
- Build two-lane roads between the largest towns and the capital city (which is also the only seaport).

**Photo 6. Health Services**

You live in a middle-income country where the number of doctors, nurses, and medical technicians has been increasing slowly for the past five years. But after they finish their training, three out of four of these people decide to stay and work in the large cities, where less than half of the population lives. You know that the people in rural areas need more health services. Experts have suggested several ways to get more health workers into the countryside. Which suggestion would you recommend to the president? Defend your decision.

- Set up a quota system in the cities; when a city reaches its limit, no new private doctors will be allowed to set up practice there.
- Increase the salaries of public health workers in rural hospitals and clinics, so that they earn more than those in urban areas.
- Build more hospitals and clinics in rural areas and supply them with more of the latest equipment.
- Establish medical teams based in the cities and send them regularly to villages throughout the country.
### Data Table: GNP per Capita

<table>
<thead>
<tr>
<th>Region and Country</th>
<th>GNP per Capita, 1987 (U.S. dollars)</th>
<th>GNP per Capita annual growth rate, 1985-87 (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North and Central America and the Caribbean</td>
<td></td>
<td></td>
</tr>
<tr>
<td>h 1 Canada</td>
<td>15,160</td>
<td>2.7</td>
</tr>
<tr>
<td>m 2 Costa Rica</td>
<td>1,610</td>
<td>1.5</td>
</tr>
<tr>
<td>m 3 Dominican Rep.</td>
<td>730</td>
<td>2.3</td>
</tr>
<tr>
<td>m 4 El Salvador</td>
<td>860</td>
<td>-0.4</td>
</tr>
<tr>
<td>m 5 Guatemala</td>
<td>950</td>
<td>1.2</td>
</tr>
<tr>
<td>l 6 Haiti</td>
<td>360</td>
<td>0.5</td>
</tr>
<tr>
<td>m 7 Honduras</td>
<td>810</td>
<td>0.7</td>
</tr>
<tr>
<td>m 8 Jamaica</td>
<td>940</td>
<td>-1.5</td>
</tr>
<tr>
<td>m 9 Mexico</td>
<td>1,830</td>
<td>2.5</td>
</tr>
<tr>
<td>m 10 Nicaragua</td>
<td>830</td>
<td>-2.5</td>
</tr>
<tr>
<td>m 11 Panama</td>
<td>2,240</td>
<td>2.4</td>
</tr>
<tr>
<td>m 12 Trinidad and Tobago</td>
<td>4,210</td>
<td>1.3</td>
</tr>
<tr>
<td>h 13 United States</td>
<td>18,530</td>
<td>1.5</td>
</tr>
<tr>
<td>South America</td>
<td></td>
<td></td>
</tr>
<tr>
<td>m 14 Argentina</td>
<td>2,390</td>
<td>0.1</td>
</tr>
<tr>
<td>m 15 Bolivia</td>
<td>580</td>
<td>-0.5</td>
</tr>
<tr>
<td>m 16 Brazil</td>
<td>2,020</td>
<td>4.1</td>
</tr>
<tr>
<td>m 17 Chile</td>
<td>1,310</td>
<td>0.2</td>
</tr>
<tr>
<td>m 18 Colombia</td>
<td>1,240</td>
<td>2.7</td>
</tr>
<tr>
<td>m 19 Ecuador</td>
<td>1,040</td>
<td>3.2</td>
</tr>
<tr>
<td>m 20 Paraguay</td>
<td>990</td>
<td>3.4</td>
</tr>
<tr>
<td>m 21 Peru</td>
<td>1,470</td>
<td>0.2</td>
</tr>
<tr>
<td>m 22 Uruguay</td>
<td>2,190</td>
<td>1.4</td>
</tr>
<tr>
<td>m 23 Venezuela</td>
<td>3,230</td>
<td>-0.9</td>
</tr>
<tr>
<td>Europe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>h 24 Austria</td>
<td>11,980</td>
<td>3.1</td>
</tr>
<tr>
<td>h 25 Belgium</td>
<td>11,480</td>
<td>2.6</td>
</tr>
<tr>
<td>h 26 Denmark</td>
<td>14,930</td>
<td>1.9</td>
</tr>
<tr>
<td>h 27 Finland</td>
<td>14,470</td>
<td>3.2</td>
</tr>
<tr>
<td>h 28 France</td>
<td>12,790</td>
<td>2.7</td>
</tr>
<tr>
<td>h 29 Germany, Fed. Rep.</td>
<td>14,400</td>
<td>2.5</td>
</tr>
<tr>
<td>m 30 Greece</td>
<td>4,020</td>
<td>3.1</td>
</tr>
<tr>
<td>m 31 Hungary</td>
<td>2,240</td>
<td>3.8</td>
</tr>
<tr>
<td>h 32 Ireland</td>
<td>6,120</td>
<td>2.0</td>
</tr>
<tr>
<td>h 33 Italy</td>
<td>10,350</td>
<td>2.7</td>
</tr>
<tr>
<td>h 34 Netherlands</td>
<td>11,860</td>
<td>2.1</td>
</tr>
<tr>
<td>h 35 Norway</td>
<td>17,190</td>
<td>3.5</td>
</tr>
<tr>
<td>m 36 Poland</td>
<td>1,930</td>
<td>.</td>
</tr>
<tr>
<td>m 37 Portugal</td>
<td>2,830</td>
<td>3.2</td>
</tr>
<tr>
<td>m 38 Romania</td>
<td>.</td>
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</tr>
<tr>
<td>h 39 Spain</td>
<td>6,010</td>
<td>2.3</td>
</tr>
<tr>
<td>h 40 Sweden</td>
<td>15,550</td>
<td>1.8</td>
</tr>
<tr>
<td>h 41 Switzerland</td>
<td>21,330</td>
<td>1.4</td>
</tr>
<tr>
<td>m 42 Turkey</td>
<td>1,210</td>
<td>2.6</td>
</tr>
<tr>
<td>h 43 United Kingdom</td>
<td>10,420</td>
<td>1.7</td>
</tr>
<tr>
<td>m 44 Yugoslavia</td>
<td>2,480</td>
<td>3.7</td>
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<tr>
<td>The Middle East and North Africa</td>
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<td></td>
</tr>
<tr>
<td>m 45 Algeria</td>
<td>2,680</td>
<td>3.2</td>
</tr>
<tr>
<td>m 46 Egypt, Arab Rep.</td>
<td>680</td>
<td>3.5</td>
</tr>
<tr>
<td>m 47 Iran, Islamic Rep.</td>
<td>.</td>
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</tr>
<tr>
<td>m 48 Iraq</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>h 49 Israel</td>
<td>6,800</td>
<td>2.5</td>
</tr>
<tr>
<td>m 50 Jordan</td>
<td>1,560</td>
<td>.</td>
</tr>
<tr>
<td>h 51 Kuwait</td>
<td>14,610</td>
<td>-4.0</td>
</tr>
<tr>
<td>m 52 Lebanon</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>m 53 Libya</td>
<td>5,460</td>
<td>-2.3</td>
</tr>
<tr>
<td>m 54 Morocco</td>
<td>610</td>
<td>1.8</td>
</tr>
<tr>
<td>m 55 Oman</td>
<td>5,810</td>
<td>8.0</td>
</tr>
<tr>
<td>h 56 Saudi Arabia</td>
<td>6,200</td>
<td>4.0</td>
</tr>
<tr>
<td>m 57 Syrian Arab Rep.</td>
<td>1,640</td>
<td>3.3</td>
</tr>
<tr>
<td>m 58 Tunisia</td>
<td>1,180</td>
<td>3.6</td>
</tr>
<tr>
<td>h 59 United Arab Emirates</td>
<td>15,830</td>
<td>.</td>
</tr>
<tr>
<td>m 60 Yemen Arab Rep.</td>
<td>590</td>
<td>.</td>
</tr>
<tr>
<td>l 61 Yemen, PDR</td>
<td>420</td>
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</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>l 62 Benin</td>
<td>310</td>
<td>0.2</td>
</tr>
<tr>
<td>m 63 Botswana</td>
<td>1,050</td>
<td>8.9</td>
</tr>
<tr>
<td>m 64 Burkina Faso</td>
<td>190</td>
<td>1.6</td>
</tr>
<tr>
<td>l 65 Burundi</td>
<td>250</td>
<td>1.6</td>
</tr>
<tr>
<td>m 66 Cameroon</td>
<td>970</td>
<td>3.8</td>
</tr>
<tr>
<td>l 67 Central African Rep.</td>
<td>330</td>
<td>-0.3</td>
</tr>
<tr>
<td>l 68 Chad</td>
<td>150</td>
<td>-2.0</td>
</tr>
<tr>
<td>m 69 Congo, People's Rep.</td>
<td>870</td>
<td>4.2</td>
</tr>
<tr>
<td>m 70 Côte d'Ivoire</td>
<td>740</td>
<td>1.0</td>
</tr>
<tr>
<td>l 71 Eritrea</td>
<td>130</td>
<td>0.1</td>
</tr>
<tr>
<td>m 72 Gabon</td>
<td>2,700</td>
<td>1.1</td>
</tr>
<tr>
<td>l 73 Ghana</td>
<td>390</td>
<td>-1.6</td>
</tr>
<tr>
<td>l 74 Guinea</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>l 75 Kenya</td>
<td>330</td>
<td>1.9</td>
</tr>
<tr>
<td>l 76 Lesotho</td>
<td>370</td>
<td>4.7</td>
</tr>
<tr>
<td>l 77 Liberia</td>
<td>450</td>
<td>-1.6</td>
</tr>
<tr>
<td>l 78 Madagascar</td>
<td>210</td>
<td>-1.8</td>
</tr>
<tr>
<td>l 79 Malawi</td>
<td>160</td>
<td>1.4</td>
</tr>
<tr>
<td>l 80 Mali</td>
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</tr>
<tr>
<td>l 81 Mauritania</td>
<td>440</td>
<td>-0.4</td>
</tr>
<tr>
<td>m 82 Mauritius</td>
<td>1,490</td>
<td>3.2</td>
</tr>
<tr>
<td>l 83 Mozambique</td>
<td>170</td>
<td>.</td>
</tr>
<tr>
<td>l 84 Niger</td>
<td>260</td>
<td>-2.2</td>
</tr>
<tr>
<td>l 85 Nigeria</td>
<td>370</td>
<td>1.1</td>
</tr>
<tr>
<td>l 86 Rwanda</td>
<td>300</td>
<td>1.6</td>
</tr>
<tr>
<td>m 87 Senegal</td>
<td>520</td>
<td>-0.6</td>
</tr>
<tr>
<td>l 88 Sierra Leone</td>
<td>300</td>
<td>0.2</td>
</tr>
<tr>
<td>l 89 Somalia</td>
<td>290</td>
<td>0.3</td>
</tr>
<tr>
<td>m 90 South Africa</td>
<td>1,890</td>
<td>0.6</td>
</tr>
</tbody>
</table>

### Key
- l Low-income economy
- m Middle-income economy
- h High-income economy
- . Data not available
Test: GNP per Capita

Part I. Vocabulary matching

Put the letter of the correct vocabulary term next to each definition. There is one more vocabulary term than needed.

1. ______ The price of a country's exports relative to the price of its imports.
2. ______ People and their ability to be productive.
3. ______ Some examples are food crops, minerals, and forest products.
4. ______ When a country sells its goods and services to other countries.
5. ______ Some examples are machines, tools, supplies, equipment, and buildings.
6. ______ When a country buys goods and services from other countries.
7. ______ Produced within a country.
8. ______ An activity that requires a lot of workers but not necessarily a lot of machines.
9. ______ A country where most people do not have all the goods and services they need.
10. ______ Currency, such as U.S. dollars, that countries use to trade with each other and to repay their debts to banks outside the country.

Part II. Multiple choice

Read each statement and circle the letter of the correct response.

1. GNP per capita measures:
   a. the actual income of each person in a country.
   b. the actual income of all adults in a country.
   c. the income each person in a country would get if GNP were divided equally.
   d. how fast the population of a country is growing.

2. Most low-income countries are located in:
   a. Africa and Asia.
   b. Africa and South America.
   c. South America and Asia.
   d. Asia and Western Europe.

3. A country can help increase its GNP per capita by:
   a. increasing its production of goods and services while decreasing its population growth rate.
   b. decreasing its production of goods and services while increasing its population growth rate.
   c. decreasing both its production of goods and services and its population growth rate.
   d. increasing both its production of goods and services and its population growth rate.

4. Between 1980 and 1987, both GNP and population:
   a. grew more slowly in developing countries than in high-income countries.
   b. grew faster in developing countries than in high-income countries.
   c. grew at the same rate in developing countries as in high-income countries.
   d. stopped growing in developing countries and in high-income countries.

5. In many developing countries as well as high-income countries, income tends to be:
   a. divided equally among all the people.
   b. concentrated in the poorest 20 percent of the population.
   c. concentrated in the richest 20 percent of the population.
   d. concentrated in the middle 60 percent of the population.

6. A middle-income country could have a GNP per capita of:
   a. $190.
   b. $290.
   c. $1,800.
   d. $19,000.

7. Manufactured products tend to:
   a. sell for less than primary products.
   b. be cheap and easy to produce.
   c. require less physical and human capital than primary products.
   d. sell for more than primary products.

8. Compared with high-income countries, developing countries tend to have:
   a. more people and produce more goods and services.
   b. fewer people and produce more goods and services.
   c. fewer people and produce fewer goods and services.
   d. more people and produce fewer goods and services.
9. In 1987, about what proportion of the world's 5 billion people lived in developing countries?
   a. One fourth.
   b. One half.
   c. Three fourths.
   d. One third.

10. When people—especially women—have a basic education and access to basic health services, they tend to:
   a. have more babies who die in infancy.
   b. have smaller families.
   c. have larger families.
   d. live shorter lives.

Part III. Short answer

Answer each question briefly but completely. Use a separate sheet of paper.

1. What are two reasons countries trade?
2. What are two problems that developing countries face when they trade with industrial countries?
3. Many developing countries do not grow enough food to feed their own people. What are three things that governments of these countries can do to help increase food production?

4. Country X is about the size of Alaska and borders on the Atlantic Ocean. Farmers in the country grow a lot of coffee. What are three kinds of infrastructure that would help the country export this coffee?

Part IV. Essay

Choose one topic and, using information and data you have learned, discuss it thoroughly. Write your answer on a separate sheet of paper.

1. What are some specific strategies a country might use to help increase its production of goods and services and, at the same time, reduce its population growth rate?

2. You are the mayor of a rural village in a small low-income country. You have learned that the president is planning to increase the country's infrastructure to help the economy grow. Write a letter to the president explaining why your village should be included in the development plans, what kinds of infrastructure you think are most needed, and how to make sure these plans disrupt people's lives as little as possible.
Answers

Worksheet 1: Vocabulary matching

1. human capital 9. physical capital
2. high-income country 10. goods and services
3. foreign exchange 11. low-income country
4. cooperative 12. GNP per capita
5. population growth rate 13. comparative advantage
6. terms of trade 14. export
7. import 15. primary products
8. labor-intensive

Worksheet 2: Understanding the poster map

1. yellow, dark green
2. high-income, low-income, middle-income
5. Africa, Asia
6. Australia, Europe, North America
8. G missiles G newspaper S doctors’ fees
   S car wash G fast food N housework
   S workers’ S postal you do
   salaries delivery yourself
   N food you G shoes
   cook at home

Worksheet 3: Understanding Chart 1

1. developing countries, high-income countries
2. GNP, population, GNP per capita
3. a. GNP per capita is low. People may not have all the goods and services they need.
   b. Africa, Asia
   c. GNP per capita is high. People may have most of the goods and services they need.
4. one fifth, four fifths
5. what is being produced, how equally it is distributed, whether people live fulfilling lives
6. a. 5.1 billion, b. 3.9 billion (2.8 plus 1.1), c. 76, d. 0.8 billion (or 800,000,000), e. 16, f. five (3.9 divided by 0.8), g. 0.4 billion (or 400,000,000), h. 8
7. (See the text accompanying the chart.)
8. GNP per capita: a. increases, b. decreases, c. stays the same.
9. For example, good health, adequate housing, enough food to eat, a good job, absence of war.

Worksheet 4: Understanding Chart 2

1. faster, at the same rate
2. Developing countries is the answer to all four questions.
3. Because population grew rapidly too.
4. Developing countries: 1.8, 3.9, 2.0. High-income countries: 1.8, 2.5, 0.7.
5. Country A: $10, 4.3 %. Country B: $122, 3.1 %.
6. This role-playing exercise requires students to think critically for themselves and to support their ideas and opinions with facts.

Worksheet 5: Understanding Chart 3

1. how high its GNP per capita is and how equally it is distributed
2. Côte d’Ivoire, India
3. a. India: 43.6, Côte d’Ivoire: 36.2, Canada: 54.7
   b. Canada
4. India: $300, Côte d’Ivoire: $740, Canada: $15,160
5. This role-playing exercise requires students to think critically for themselves and to support their ideas and opinions with facts.

Worksheet 6: True or false statements

1. True
2. False; Africa
3. True
4. True
5. False; low-income country
6. False; faster
7. True
8. True
9. True
10. False; seven and a half times more income than
11. True
12. True
13. False; high GNP per capita
14. True

Worksheet 7: Exploring the photographs

This standardized worksheet is designed for use with all six photographs and their texts. Teachers may wish to ask specific questions about each photograph and its text. Students may answer orally or on a separate sheet of paper.

Worksheet 8: Using the Data Table

<table>
<thead>
<tr>
<th>Country</th>
<th>GNP per capita</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td>$130</td>
<td>Sub-Saharan Africa</td>
</tr>
<tr>
<td>Bhutan</td>
<td>$150</td>
<td>Asia and the Pacific</td>
</tr>
<tr>
<td>Chad</td>
<td>$150 -2.0</td>
<td>Sub-Saharan Africa</td>
</tr>
<tr>
<td>Zaire</td>
<td>$150 -2.4</td>
<td>Sub-Saharan Africa</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>$160 0.3</td>
<td>Asia and the Pacific</td>
</tr>
<tr>
<td>Malawi</td>
<td>$160 1.4</td>
<td>Sub-Saharan Africa</td>
</tr>
<tr>
<td>Nepal</td>
<td>$160 0.5</td>
<td>Asia and the Pacific</td>
</tr>
</tbody>
</table>
Worksheet 10: Looking at aggregate data

1. low-income, middle-income, high-income
2. low-income countries, high-income countries
3. low-income countries, high-income countries
4. low-income countries, high-income countries
5. low-income countries, high-income countries
6. middle-income countries, high-income countries
7. 50

8. The standard of living seems to be higher in countries with higher GNP per capita. Population in developing countries is large and growing fast, and people in these countries tend to have less income and a lower life expectancy at birth than people in high-income countries.

Worksheet 11: What would you do?

This worksheet is designed to reinforce and consolidate what students have learned in the photographs, texts, and preceding worksheets. These role-playing exercises require students to think critically for themselves and to support their ideas and opinions with facts. If students work alone, they can write their answers on separate sheets of paper. If they work in groups, they should outline their answers on separate sheets of paper, then present and explain their position to the class.

Test: GNP per Capita

Part I. Vocabulary matching
1. d
2. e
3. k
4. j
5. f

Part II. Multiple choice
1. c
2. a
3. a
4. b
5. c
6. c
7. g
8. b
9. i
10. a

Part III. Short answer
1. • To earn foreign exchange by selling their goods and services; this money is used to pay for imports and to repay foreign debt.
   • To obtain the goods and services they need but do not produce themselves.
Part IV. Essay

1. Answers should include: provide basic education for all and on-the-job training for workers; invest in machinery and factories to produce more manufactured goods; ensure better crop prices for farmers and more storage buildings and expert advice; get more and better health services to all people, especially the poor; build transportation and communications networks; increase trade to earn more money and to import more of what the country needs to grow.

2. The village should be included in the development plans because of its strategic location, good climate, large river, raw materials available, many people willing and able to work, and good land for farming or factory location. Infrastructure needed could include bridges, dams (to irrigate fields or generate electricity), roads, railways, electricity and telephone systems, storage buildings, factories. Minimize disruption to people by asking them what they want, including them in the decisionmaking process, and doing an environmental impact study.
Gross value in a y value of its
The chart shows that between 1965 and 1980 GNP per capita grew faster in developing countries than in high-income countries. In 1980–87, however, the growth of GNP per capita slowed in both groups of countries. The chart also shows how rapid growth in the GNP of developing countries has been offset by population growth in both time periods.
GNP per capita is low in developing countries. They produce less than a fifth as many goods and services as high-income countries but have five times as many people. The chart shows GNP and population for both groups of countries in 1987. It also shows GNP per capita, or the part of GNP each person would have if GNP were divided equally. GNP per capita helps measure the material output of a country, but it does not show what is produced, how equally the income from this production is shared by all the people, or whether these people lead fulfilling lives.

To increase GNP per capita, all countries are trying to produce more goods and services; that is, they are trying to make their economies grow. Economic growth depends on many factors: improving transportation, communication, and energy systems, providing better tools and technology, giving a fair price for goods and services, encouraging savings and investment, increasing the value and variety of exports, and having better access to world markets to sell exports. Economic growth also depends on providing people with the opportunity to participate in and benefit from the economy. This means helping both men and women be more productive by improving their health, education, and work skills. In addition, many countries are trying to slow their population growth, which can also help increase GNP per capita.
The denominations, the classifications, the boundaries, and the colors used in the map do not imply any judgment on the legal or other status of any territory or any endorsement or acceptance of any boundary.
national product (GNP) per capita is the dollar of a country's final output of goods and services ear, divided by its population. It reflects the of a country's economic activity and the income people.

GNP per Capita

- Low-income countries ($480 and less)
- Middle-income countries ($481–$5,999)
- High-income countries ($6,000 and more)
- Data not available

Countries with the lowest GNP per capita are the lightest color on the map; countries with the highest GNP per capita are the darkest color. Low- and middle-income countries are also sometimes called developing countries. High-income countries include industrial countries.
To begin to understand what life is like in a country, it is not enough to know how much income that country generates. You must also know how equitably that income is distributed, which can vary widely from country to country. For example, the chart shows that in India, a low-income country, the poorest 20 percent of the population earn 7.0 percent of the income, while the richest 20 percent earn seven times more (49.4 percent). In Côte d’Ivoire, a middle-income country, the poorest 20 percent earn 2.4 percent of the income, whereas the richest 20 percent earn twenty-five times more (61.4 percent). In Canada, a high-income country, the poorest 20 percent earn 5.3 percent of the income, and the richest 20 percent earn seven and a half times more (40.0 percent).
1. EDUCATION AND TRAINING

A primary school class in a rural community near Dhaka, Bangladesh

The children in this picture are learning to read, write, and do simple arithmetic. Such classes help increase a country's GNP per capita because people with a basic education tend to be more productive workers and as couples to have fewer children. Bangladesh wants to ensure that all its children have the chance to receive a basic education because many of its adults, especially women, did not have that chance when they were growing up.

Bangladesh also wants to offer more adult literacy classes and technical training so that workers—men and women—can learn new skills that will help them become more productive and find better jobs. For example, factory workers can learn to operate and maintain different kinds of equipment. Homemakers and owners of small businesses can learn how to record and calculate expenses and income. Farmers can learn about new techniques, special fertilizers, and new kinds of seeds.

Although it does not have a lot of money now, Bangladesh is investing as much as possible in education and training because it wants to increase its supply of educated, skilled workers (also called human capital). The government knows that such an investment is essential for economic growth. It also knows that this investment will help people improve their standard of living, provide for their families, and lead fuller, more satisfying lives.

But increasing human capital takes a lot of time, money, and effort. Individuals must work long and hard to learn new skills. Countries have to buy equipment, produce textbooks, build schools, and train and pay teachers. They must also make sure that all their people—rich and poor, male and female, rural and urban—have an equal chance to get a basic education, technical training, and good jobs.

With so much to be done, poor countries have to decide how best to use their limited resources. For example, a country may have to give up some adult education programs in order to build all the primary schools it needs. Countries also may want to increase their resources by borrowing money from other governments, banks, and international development institutions—money they will eventually have to repay.

Pronunciation: Dhaka (Duh-kuh).
2. INDUSTRY

Workers in a textile mill near Nairobi, Kenya

These workers are manufacturing fabric from domestic cotton at a textile mill near Nairobi. Workers in nearby villages use the fabric to sew shirts and dresses. The clothes are sold at the village markets, to merchants in Nairobi, the capital, and to dealers in Mombasa, the country’s principal seaport. The goods are distributed throughout the country on a network of roads and railways. A certain amount of these finished clothes is exported, along with some of the raw cotton and woven fabric.

Developing countries such as Kenya are trying to increase their GNP per capita by producing more manufactured goods. Why? First, manufactured products (such as shirts) sell at higher prices than do primary products (such as cotton). This is because the work that goes into making them adds to their value.

Second, countries usually have resources (such as good soil, minerals, or skilled labor) that let them produce and sell certain goods more cheaply than other countries can. When a country has such a competitive edge—or comparative advantage—it can produce what it does best and trade for the rest.

Third, industrialization creates new jobs. This is especially important for developing countries because they may not have a lot of machines, but they generally have a large labor force.

Fourth, industrialization increases the amount of goods available, so people have more of what they need. At the same time, the country has more goods to export, so it can earn more money from abroad (or foreign exchange). It uses this foreign exchange to import other goods and services it needs and to repay its debts.

But industrialization is expensive. To pay for it, a country must use its own savings, and it often must borrow money from—and eventually repay—other governments, commercial banks, and international development institutions.

Industrialization raises many questions. What kinds of goods should the country manufacture? Should the factories be owned and operated by the government or by private business? Should the wages and prices be set by the government or by the marketplace? There are no easy answers to these questions, and what works for one country may not work for another.
3. AGRICULTURE

Selling milk at a dairy cooperative in the state of Rajasthan, India

The dairy farmer in the picture is selling milk from her cows to the local dairy cooperative. She is pleased because having the cooperative lets her and other small-scale farmers work together to accomplish what they could not do alone. For example, the cooperative was able to afford a refrigerator, so now it can buy milk from dairies like hers, store it, then sell it in town for a good price. With the money she is earning through the cooperative, the farmer can buy things her family needs. She will, if possible, save part of the money, so someday she can buy another cow and produce even more milk to sell.

The economies of most developing countries depend largely on agriculture, yet many of these countries do not produce enough food to feed all their own people. Instead, they must buy imported food with the foreign exchange they have earned from selling their exports. Producing more food crops, then, is critical if developing countries want to increase GNP per capita and make their economies grow.

Here are some of the things developing countries are doing to help farmers produce more food:

- getting farmers a fair price for what they produce, so they will want to produce more
- providing land security, so that even farmers who do not own their farmland will know they can stay on it
- giving farmers better access to small loans from banks, so they can invest in tools, seeds, and fertilizer
- offering expert advice on how to prepare the soil, irrigate fields, plant and rotate crops, care for livestock, and protect the environment
- constructing storage buildings, so crops do not rot or get eaten by rodents, and farm-to-market roads, so crops can be transported to buyers
- providing access to basic education, so farmers and their families can learn to read, write, and do simple arithmetic
- encouraging more cooperatives to help farmers get bank loans, buy fertilizer and seeds, and share tractors and other equipment that will help them be more productive.

Pronunciation: Rajasthan (RAH-jus-tahn).

Measures of Progress Poster Kit 3: GNP per Capita

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Washington, D.C. 20433, U.S.A.

World Bank photo
Photo 3: IB-1170

4.1
4. TRADE

*Loading bananas onto a ship in Guayaquil, Ecuador*

These workers are loading boxes of bananas grown in Ecuador for export to markets in North America. Like many developing countries, Ecuador sells its goods—mostly primary products—to other countries. Primary products include agricultural products (such as bananas, coffee, and cocoa) and raw materials (such as forest products, oil, and copper).

Some of the income—or foreign exchange—Ecuador earns from selling these goods abroad is used to import manufactured products that the country needs but does not itself produce. The rest of the foreign exchange must be used to pay back the money Ecuador has borrowed from foreign banks, international development institutions, and other countries to help develop its economy.

Most developing countries need to trade to help their economies grow. Some of these countries have been able to trade very successfully, but others have not. A developing country that produces a single crop or mineral, for example, may not be able to export enough of it to import all the trucks or electrical generators it needs.

Furthermore, the prices of primary products have tended to fall over time, especially compared with those of manufactured goods. As a result, a country that once exported two tons of copper to earn the foreign exchange needed to import one tractor may now have to export three tons of copper to buy the same tractor. This is an example of worsening terms of trade.

And too often countries have not recognized the real cost of their exports. In trying to sell as much as it can, a country may be using up resources that cannot be replaced, thereby endangering the environment. This can happen, for example, when a country cuts its forests to export lumber or clear land for farming.

To help solve these problems, developing countries are trying to export a variety of primary products (so if the price of one drops, there will still be income), to limit the supply of a product and thus increase its price (as the oil-exporting countries have done), and to make and export more manufactured products. They are also working to protect and restore the environment by planting trees, using more efficient farming techniques, and developing alternative sources of energy.

Pronunciation: Guayaquil (gwhy-ah-keel).
5. INFRASTRUCTURE

Building a railway northwest of Lagos, Nigeria

When the railway in this photograph is completed, it will connect many towns and villages with each other and with Lagos, the capital and principal port. To farmers and other rural workers, the new railway will mean more jobs and more income because more produce can be shipped with less spoilage to new and bigger markets. At the same time, more goods and services from the capital and other towns will become available, people will be able to travel more easily, and information and ideas will spread more rapidly.

Railways are just one example of infrastructure. Other examples are roads, ports, buildings, hydroelectric dams, telecommunications networks, and water supply systems. Infrastructure increases a country's physical capital, which the country needs to help its economy grow and to increase its GNP per capita.

Nonetheless, building up infrastructure is expensive, and a country must make some hard decisions about how to spend its money. For example, should it construct a modern hospital or train village health workers? Should it build an urban sewage system or dig village wells?

In addition, building up infrastructure can change people's lives. Roads, for example, can help to increase a rural family's income, but they may also encourage young people to leave the farms for work in the city. Roads can open up new land for settlement, but if too many people move in, the environment may be seriously damaged.

Hydroelectric dams may bring electricity—light and power—to towns and factories, but they may also flood thousands of acres of farmland or forest.

Telecommunications networks—for telephones, radios, and televisions—may bring news and entertainment to people throughout the country, but they can also bring ideas, customs, and values that are different from those of the traditional culture.

Changes in infrastructure must be planned carefully to minimize the disruption to individuals, families, communities, and the environment. The government must work together with the people to decide what is needed, what tradeoffs and compromises are acceptable, and how to ensure the changes are positive.

Pronunciation: Lagos (Lay-gos).
6. HEALTH SERVICES

A child care class in Debre Zeit, Ethiopia

This government medical worker is teaching mothers about nutrition, hygiene, family planning, and health care in a small town near Addis Ababa, the capital of Ethiopia.

She is discussing:
- what kinds of food families should eat to stay healthy, and how to cook and store this food safely
- how important it is for both children and adults to wash their hands regularly with soap
- what immunizations children need to protect them from polio, measles, and other diseases
- how to save children from dying of simple dehydration caused by diarrhea (a condition that kills millions of children a year)
- how couples can decide if they want to have children and plan the spacing of their births.

Classes such as this one help people stay healthy and productive because they focus on preventing illness rather than on treating it after it has developed.

Developing countries are also working hard to provide people with other critical health services. These include:
- plenty of clean, safe water for drinking, bathing, washing, and cooking
- places to store water and food so they stay clean and fresh
- simple but sanitary garbage and sewage facilities
- clinics throughout the country—especially in rural areas and in urban slums—that provide quick, efficient health care
- medical experts who travel to villages and train local health workers.

Good health services are one of the most important investments a country can make in its future. When all the people—rich and poor, rural and urban, male and female—have access to these services, the standard of living improves, and people can become healthier, more productive workers. Furthermore, as health conditions get better and fewer children die, parents will have smaller families, and population growth will slow down. All of this will help increase GNP per capita and thus help the economy grow.

Pronunciation: Debre Zeit (dellers zeet).