

Unit I: Our World Economics

World Store: Observing Our Divided World

Unit Learning Objectives

Unit I, World Store, introduces students to the concepts of the First and Third Worlds, as well as emerging markets, and familiarizes students with some of the commercial relationships and economic distinctions between our planet's wealthiest and poorest nations.

By the end of this unit, *ALL* students should be able to:

- Identify on a globe or map our planet's wealthiest (First World) and poorest (Third World) regions, as well as intermediate emerging markets.
- Understand basic global trends in the importing and exporting of different types of goods.
- Understand that different countries use different currencies, and refer to exchange rates to convert between currencies.
- Analyze basic socioeconomic indicators — such as GDP per capita, percentage of population below poverty line, or infant mortality rate — that throw light on the relative wealth or poverty of a nation.
- Understand how the prehistoric development of agriculture likely played a decisive role in determining the economic and technological advantages of peoples in different parts of the globe.

ADVANCED students should be able to:

- Predict comparative socioeconomic indicators for wealthy versus poor countries.
- Recognize the importance of the informal sector, particularly in poor countries.
- Discuss problems related to the lack of health insurance.
- Understand the difference between fixed and floating exchange rates.
- Understand the relationship between the development of agriculture and the transition from hunter-gatherer to sedentary lifestyles.

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Why We Use the Term, “Third World”

Dear Educator,

I was born and raised and have spent most of my life in the beautiful Third World – the preferred term I use to describe my region of our planet. When I think of home, I think of the stunning images of soaring Andes, sprawling Amazonia, unpaved roads of red earth, and outdoor markets.

While there is a trend in the United States to no longer use the term, “Third World,” it is important to recall that this is, etymologically, a political term rooted in no pejorative connotations.

The terms, First, Second and Third Worlds, arose during the Cold War to describe nations that were, respectively, aligned with the United States, Communist, or not directly ideologically involved in the conflict. By association, First World became another way to describe wealthy nations while Third World came to refer to poor countries.

While preferred terms, “developed” and “developing” countries, are now emerging, I would hasten to point out that these adjectives are not completely bland and free of negative connotations – as they suggest that wealthy countries are somehow complete while poor countries, by contrast, are not.

We use a variety of language in *Our World Economics* to familiarize students with any of the terms they may come across to describe different regions of the world. We encourage teachers to do the same, and to not limit possibilities for legitimate discourse by unduly politicizing language.

Wishing you joy in your classroom journeys,



Governor Germán Velasco
Project producer



Unit I

Overview of Activities

1. Video: World Store
Introduction to developing countries, world trade and exchange rates by means of a grocery shopping trip.
2. ClothesMart
Group activity introducing imports and exports.
3. How Much Is Enough?
Individual activity and classroom discussion exploring the meaning of poverty.
4. Different Countries, Different Lives
Group activity introducing common socioeconomic indicators.
5. Your Kitchen
Homework assignment and follow-up activities exploring different global markets and types of commercial products.
6. Travel Money
Introductory and advanced Internet research assignments familiarizing students with foreign currencies and exchange rates.
7. Llamas and Lomas
Essay and short-answer questions exploring the prehistory and likely economic consequences of the development of agriculture.

I.1. Video: World Store: Instructions

Synopsis

The World Store video takes students grocery shopping in Santa Cruz, Bolivia. Students see first-hand the appearance of a typical Third World city, and also learn that Santa Cruz is part of an international economy: Bolivians drive imported cars, wear imported clothes, and export minerals and hydrocarbons. They sell tropical produce in their markets — star fruits, pineapples, and bananas — that are also exported to the United States.

Students are introduced to a foreign currency, the boliviano, and are shown the paradox that while groceries, according to official exchange rates, are “inexpensive” in Bolivia, grocery shopping for local Bolivians, who earn less than Americans, is actually expensive.

The video prepares students to explore deeper questions of international wealth and poverty that will be investigated throughout the remainder of the *Our World Economics* lesson plans: What mechanisms make some countries rich and other countries poor?

Class Discussion: Follow-Up Questions

- 1) What are some of the similarities between Santa Cruz and your students’ hometown? What are some of the differences?
- 2) The type of money that people use in Bolivia is called the boliviano. Most countries in the world use their own kind of money. Have any of your students ever traveled to another country and used a different kind of money? Can students name some types of money used in other parts of the world?
- 3) Did students notice any items in the video that were probably imported from other countries?

There were foreign automobiles in the video. The peanut butter was, in fact, imported from the United States.

- 4) Why do students suppose that the milk was packaged in a bag?

Bags are less expensive to manufacture than cartons or bottles.

- 5) Did students notice anything in the video that might be exported to the United States?

Many tropical fruits such as pineapples, bananas and avocados are exported to the United States from Latin America. The pejorative term, banana republic-

lic, was coined to refer to Latin American countries who relied upon one export (such as bananas) in order to survive.

6) Why does grocery shopping that seems inexpensive to Americans seem expensive to Bolivians?

Because most Bolivians earn far less money than Americans. Recall that the average (median) annual household income in Bolivia is \$1,000 compared to approximately \$44,000 (2006 figure) in the States.

Note for advanced students:

These numbers are to a certain extent artificially skewed because many rural people in Bolivia rely on subsistence farming and/or bartering. Additionally, many people work in the informal sector; this means unofficial or even illegal work that cannot be measured by tax collection.

Approximately 23 percent of Bolivians live on less than one dollar per day – something that would not be possible without subsistence farming, bartering, and informal sector work.

7) Why do students think the video is entitled World Store?

The video suggests that the world we live in is, in many ways, like a giant store fueled by international commerce. Cars made in Japan and Germany can be sold in Bolivia or the United States. Tropical fruit in Bolivia is exported to North America. South Americans purchase shirts and jeans produced by American companies.

Advanced Discussion Questions

1) Why are the shirt and jeans in the video more expensive than in the United States?

Later activities, such as Class Market and Basket of Licuados, will explore the phenomenon of pricing in greater depth. Partly, these items are more expensive because they are imported and consumers are paying for transportation costs. In addition, they each have a brand name appeal that allows the manufacturer to charge higher prices.

2) How many students have traveled to other countries and noticed dramatic differences in prices? What might be the reasons for this phenomenon?

One reason for more expensive prices is exchange rates; when people travel overseas, they need to purchase foreign currency. The relative economic power of a country largely determines the exchange rates of its currency. Factors such as overall debt and foreign debt, government reliability, and size of an economy all play a role in determining exchange rates.

Western European countries, where travellers will usually experience more expensive prices than in the United States, also levy higher sales taxes than the United States. Thus, goods and services tend to be more expensive in Western Europe than in the United States.

The exercise, Travel Money, will explore the concept of exchange rates more closely.

I.2. ClothesMart: A Classroom Activity: Instructions

Objectives

- To introduce students to the concepts of exporting, importing and free trade.
- To identify clothing importers to the United States on a world map.
- To raise awareness of the number of items in everyday life that are imported.

Instructions

1) Break students into small groups. (Same-sex groups may be advisable.) Ask students to examine the manufacturers' labels on all of the items they wear or carry to see where the items were made. Each group should create a chart showing the different countries where their items were manufactured. For example:

<u>Jackets</u>	<u>Jeans</u>	<u>Shoes</u>	<u>Watches</u>	<u>Ipods</u>	<u>Cell phones</u>
China	Indonesia	Mexico	Japan	USA	USA
USA	China	Honduras	USA		Germany
Indonesia	USA	USA	China		Korea

2) As a class, make a similar chart on the board showing all of the data collected by the different groups.

3) Introduce the concepts of imports and importing. Explain that all of the items of clothing that were not manufactured in the United States are imported from another country. Ask for a show of hands of how many students have in their possession:

- No imported items.
- Only one or two imported items.
- Three or more imported items.



4) Use a world map to introduce the concept of exports. Explain that whenever a country sells its goods in a different country, it is exporting. Call students to the front of the room to identify specific exporters on a world map. For example:

- Identify a country that exports t-shirts to the United States.
- Find a country that exports backpacks to the United States.

5) Explain the concept of free trade: Free trade means that vendors in certain countries are able to sell their goods or services in other countries. Using a map, show that a private manufacturer of chocolates in your own hometown is perfectly free to ship their chocolates to China and to sell them in stores there.

Ask students why a chocolate vendor in your home town might want to export their chocolates to China.

Vendors are often looking for more possibilities to sell their wares, for more customers, and more ways to make a profit. A chocolate manufacturer may choose to export to China to reach more customers, sell more chocolate, and make more money.

6) Ask students why so many of the personal items that people in the class own were imported from other countries.

For the same reason that your hometown chocolate producer might want to export to China, a clothing manufacturer in Mexico or Indonesia might want to export to the United States; to reach more customers and to make more profits.

In most cases, students (or their parents) purchase items that they think are reasonably priced. The less expensive an item of clothing, for example, the more likely people are to buy it. Many imported items are inexpensive, and that is why Americans buy so many imported goods.

Advanced Discussion Question

Why are t-shirts made in Mexico inexpensive in the United States while Levis are relatively expensive in Bolivia?

Pricing has to do with competition. Many companies produce t-shirts. While many companies produce jeans, Levis have a name-brand appeal. Customers are willing to pay more for the label, so Levis can charge higher prices.

In the United States, many stores sell Levis and this competition drives prices down. Latin America has far fewer Levis distributors, so prices are driven up.

I.3. How Much Is Enough? Individual Activity: Instructions

Objectives

- To raise awareness of what poverty means.
- To prepare students to appreciate emotionally the subsequent Different Countries, Different Lives exercise.

Advance Assignment

Ask students to complete the How Much Is Enough? activity sheet. Encourage them to fill in as many items that they use daily as they can think of.

Follow-Up Discussion

1) Call on students to name some of the items they listed. Explore to what extent students went into detail: Did they remember electricity? Running water? Their house? The school building? Instruct students to write these additional items down.

2) Ask students how they would define poverty.

One definition of poverty is “the lack of certain essential items such as food, water, sanitation facilities, shelter and clothing.” Write this definition on the board and ask students to copy it down. Inform them that approximately 600 million children worldwide live in poverty.

3) Have students return to their activity sheets. Tell them to imagine a child living in poverty who only has one meal per day and lives in a one-room building without water or electricity. Ask students to cross off every item on their activity sheet that such a child living in poverty would not have.

4) Six hundred million people is approximately twice the number of citizens of the entire United States. How do students feel about the fact that so many of the world’s children live in conditions of poverty?

How Much Is Enough? Activity Sheet

Think about your day. From the moment you wake up in the morning until the moment you sleep at night, what do you use? A few items have been filled in for you. Write down as many items as you can think of.

<u>Activity</u>	<u>Items Used/Consumed</u>
Waking Up:	Bed, pillows, sheets, pajamas, clock, lamp...
Breakfast:	Milk...
School:	Paper, pencil...
Lunch:	
Recess:	
After school:	
Dinner:	
Evening:	Toothbrush...
Bedtime:	

This shoe-shine boy contributes to his family's income.



I.4. Different Countries, Different Lives: Classroom Activity: Instructions

Objectives

- To introduce students to common socioeconomic indicators.
- To demonstrate how indicators are used to paint a big picture of what life is like in a country.

Instructions

Break students into groups of three to five, and give every person an activity sheet. Explain that even though the groups are guessing at the answers to the questions, they should have a reason for each guess, and they should agree on their answer.

Give students approximately 30 minutes to answer all 10 questions. This exercise introduces a great many new vocabulary terms and concepts; circulate among the groups to answer questions that arise.

Follow-Up Discussion

1) Begin by asking the students what it is possible to learn about a country by looking at its socioeconomic indicators. Try to elicit categories from them.

The indicators in the Different Countries, Different Lives activity sheet throw light on four broad areas:

- Wealth and poverty.
- Health.
- Infrastructure.

(Explain that infrastructure refers to the systems of basic services such as railroads, airports, television stations, sanitation systems or electric grids.)

- Education.

2) Ask students which indicators provide information related to each of the four categories.

- Wealth and poverty.

All of the indicators throw light on wealth and poverty. GDP per capita and percentage of people below the poverty line are the most powerful indicators.

- Health.

Infant mortality rate and life expectancy at birth are directly related to health. Population below poverty line is also a very informative indicator of a country's state of health.

- Infrastructure.
The questions on telephones, broadcast media and transportation are all related to infrastructure.
- Education.
Literacy levels are an indicator of education.

3) Before handing out the answer sheet, go over students' guesses to each of the 10 questions. Ask the class to explain some of the rationales for their guesses. Write guesses on the board.

4) Once all of the questions have been answered, hand out the answer sheets, and allow students to read the correct answers. Elicit students' emotional response to the actual statistics. How do they feel about the fact that Americans are more likely to survive infancy than Bolivians? That Americans enjoy 12 more years of life than Bolivians?

5) Instruct roughly 64 percent of the class to stand up to represent the percentage of Bolivians living below the poverty line. Explain that, in an average group of Bolivian youth, these would be the number of children who very likely would not have enough to eat all year round.

Mention that (according to the Childhood Poverty Research and Policy Centre) approximately 600 million children worldwide, twice the total population of the United States, live in poverty.

6) Next, ask roughly 12 percent of the class to stand up to demonstrate how many American children live below the poverty line. Is it surprising that the United States, a country with a GDP of \$44,000 per capita, has 12 percent of its population living in poverty? Discuss how this can happen: That even if a country is wealthy, its wealth is not distributed evenly. The richest people in the country, like Bill Gates, and the poorest people in the country – the homeless – are all included in the *average* GDP per capita.

7) Why might the amount of arable land in a country contribute to its wealth?

Arable land shows how much food a country can produce for itself, and therefore how independent it can be. Arable land also suggests how likely a country was to develop agriculture in its ancient history; archeologists and geographers tell us that agriculture is the single most important precursor to the development of civilization.

An important exception are the Arabian oil-producing states. These countries, mostly desert, have virtually no arable land. Until oil was discovered in the Gulf States, they were also very poor.

8) How might a low level of infrastructure make it difficult for a country to build wealth?

Poor infrastructure makes it harder to do business. For example, farmers may be able to grow their products, but then they have trouble transporting their produce to the marketplace because there are not enough good roads. Or, offices may have difficulties maintaining reliable phone and fax lines and Internet services.

9) The indicators showed that Bolivia experiences a negative migration rate (people tend to emigrate out of the country), while the United States experiences a positive migration rate.

Many of your students are probably the descendents of immigrants or are themselves immigrants. Ask students to think about why their own families immigrated to the United States. What does the flow of migrants suggest about a country's level of wealth?

When a country is poor and people cannot find ways to make a living, they will emigrate to another country. If a country has a positive flow of immigrants (people moving into the country), then it is probably a wealthy country. If a country has a negative flow of immigrants (people leaving the country) it is probably a poor country. Of course, there are also other reasons that people sometimes leave their country of origin, such as war or political persecution.

Advanced Discussion Question

Bolivia offers universal health coverage to mothers and children under five. In the United States, according to the U.S. Census Bureau, approximately 16 percent of Americans do not have health insurance. How is this possible?

In Bolivia, national law calls for free, government-sponsored basic health coverage for mothers and their children under age five, including: pre-natal visits, hospital care for deliveries, and check-ups and vaccines for young children. Bolivia funds this program with taxes and foreign aid.

In reality, this program is utilized by 93 percent of mothers in urban areas but only seven percent of mothers in rural areas. In many cases, rural mothers, who are largely indigenous people, choose not to use the system because it does not conform to their personal and spiritual beliefs.

The United States experiences the highest rate of healthcare uninsurance of any industrialized country in the world; over 40 million Americans do not have health insurance. The United States offers no system of universal health coverage. Rather, federal government systems, Medicare and Medicaid, support the elderly, people with disabilities, and poor people. In addition,

State programs, such as the Children's Health Insurance Program, provide some coverage to some young children but these programs are not universal.

Virtually every other industrialized country in the world offers universal health coverage to its population. How and whether such a system should be implemented in the United States remains a question of continuing debate. Under current circumstances, with its combination of public and private insurances, the United States spends more per capita on healthcare than any other country in the world.

Additional Reading for Teachers and Advanced Students

For a historical analysis of forces that lead to the provision of socialized medical services, *Our World Economics* recommends *The Social Transformation of American Medicine* by Paul Starr. This book is written at the college level.

Note: The data for this exercise was taken from the Central Intelligence Agency's World Factbook.



Phone lines prominently on display in Santa Cruz.

Different Countries, Different Lives: Activity Sheet

Exploring Socioeconomic Indicators

“Socioeconomic indicators” are collections of data about a country’s economy and people. These statistics help policy makers and researchers to have a better understanding of the quality of life for people in a particular region.

In groups, try to guess the answers to the questions below. Your answers do not have to be exactly right, but your group should agree on the reasons for each of your guesses. Remember that Bolivia is a poor country and the United States is a wealthy country.

1) Literacy Levels

In Bolivia, 86.7 percent of the population over age 15 knows how to read and write. Guess the “literacy level” for Americans over age 15; in other words, what percent of Americans over age 15 knows how to read and write?

2) Population below Poverty Line

“Population below poverty line” refers to the amount of people in a country who probably do not have enough income to meet all of their basic needs for food, shelter and clothing. What percent of Bolivians do you think live below the poverty line? What percent of Americans?

3) Infant Mortality Rate

In the United States, for every 1,000 babies born alive, 6.37 will die in infancy. This is called the “infant mortality rate.” Estimate the infant mortality rate in Bolivia.

4) Life Expectancy at Birth

A child born in Bolivia can expect, on average, to live to be about 66 years old. What do you think is the “average life expectancy” for a child born in the United States?

5) Telephones

In Bolivia, there are seven land lines and 26 cell phones for every 100 people. How many cell phones and land lines do you think there are for every 100 people in the United States?

6) Broadcast Media

There are 2,218 television broadcast stations and over 13,000 AM or FM radio stations in the United States. How many television and radio stations do you think there are in Bolivia? (Bolivia is approximately one-ninth the size of the United States.)

7) Transportation

Bolivia has 2,343 miles of paved roads and 38,175 miles of unpaved roads. How many miles of paved and unpaved roads do you think there are in the United States?

8) Gross Domestic Product (GDP) per Capita

Economists use “GDP per capita” to estimate how wealthy a country is. GDP is the total amount of wealth that a country creates each year. “Per capita” means “per person.” In other words, GDP per capita is the average amount of money that a country has to spend on each member of its population every year.

The United States has the highest GDP per capita in the world – approximately \$44,000 per person per year. How much money do you think is available yearly for each Bolivian citizen?

9) Arable Land

“Arable land” is land that can be used for growing crops. About 18 percent of the land in the United States is arable. This is actually a very high percentage. What percentage of Bolivian land do you think is arable? (Remember, Bolivia is, to a great extent, a mountainous country, and it also has tropical rainforests.)

10) Migration

The United States has a migration rate of 3.05 immigrants per 1,000 members of the population. That means that every year, for every 1,000 people living in the United States, 3.05 new people immigrate to this country. What do you think the migration rate is in Bolivia?



Bolivian cities and towns do not extend to the highest mountain peaks.

Different Countries, Different Lives: Answer Sheet

1) Literacy Levels

99 percent of Americans over age 15 can read and write.

2) Population below Poverty Line

64 percent of Bolivians and 12 percent of Americans live below the poverty line.

3) Infant Mortality Rate

For every 1,000 live births in Bolivia, 40.43 will die as infants.

4) Life Expectancy at Birth

A child born in the United States will probably live to be 78 years old.

5) Telephones

The United States has 89 landlines and 73 cell phones for every 100 people.

6) Broadcast Media

There are 48 television stations and 244 AM or FM radio stations in Bolivia.

7) Transportation

The United States has over 4 million miles of paved roads and over 1.4 million miles of unpaved roads.

8) Gross Domestic Product (GDP) per Capita

Bolivian GDP per capita is approximately \$3,100.

9) Arable Land

2.78 percent of Bolivian land is arable.

10) Migration

Bolivia has a negative migration rate of 1.18 immigrants per population of 1,000. A negative migration rate means that people are moving out of the country.



Many city-dwellers in Bolivia rely on public transportation.

I.5. Your Kitchen: Homework and Classroom Activity: Instructions

Objectives

- To identify different categories of commodities such as fresh produce, simple manufactured items, and electronic items.
- To explain the concept of industrialization.
- To show the link between the types of goods that a country produces and its likely level of industrialization.
- To introduce the categories of world economic zones: First and Third Worlds, plus emerging markets.
- To emphasize that the level of wealth in these regions of the globe is also related to the quality of life and level of health of the general population.

Advance Homework Assignment

Assign the Your Kitchen activity sheet.

Follow-Up Discussion

1) Go over some of the responses to the Your Kitchen activity sheet. Make an extensive list on the board of countries exporting to the United States.

2) Ask students if they can think of categories for the different goods they found in their kitchen. Ultimately, suggest the following four categories and write them on the board:

- Simple manufactured items (i.e., dish cloths, dishes).
- Electronic items (i.e., coffee maker).
- Fresh produce.
- Processed foods.

3) Break the class into small groups. Instruct students to compare the data they collected of items in their kitchens in order to determine which of the four types of products are most likely to be produced in which countries. Write the results on the board; for example:

<u>Simple manufactured items</u>	<u>Electronic items</u>	<u>Fresh produce</u>	<u>Processed foods</u>
China	Japan	Mexico	China
Mexico	Korea	USA	USA
USA	Germany		
	USA		

Note: Since the United States represents the home economy, instances of all types of products originating in this country will be found.

4) Introduce the concept of industrialization: Industrialization refers to the degree of communication and transportation infrastructure, factories, and automated means of production. An industrialized nation relies on factories, machinery, and automation to manufacture and transport many of its products.

Ask the students which are easier to produce, simple manufactured items like dishcloths or electronic items like a microwave oven? What might you be able to guess about the countries that tend to produce these different types of goods?

Electronic items are more complex to manufacture. As noted, the countries that they tend to come from – such as the United States, Japan, or Germany – are often called industrialized nations. Typically, industrialized nations are the world's wealthier nations.

Simple manufactured items are easier to manufacture. Items like dishcloths or paper plates are more likely to be produced by less industrialized nations like Bolivia or Mexico.

5) Using a world map, call on students to point out some of the regions in the world that they think are probably wealthier and more industrialized, and some of the regions that they think are probably poorer and less industrialized. Ask the reasons for their guesses.

Good guesses would point to exporters of electronic items as industrialized. Countries that primarily export simple manufactured goods or processed food are probably less industrialized.

6) Introduce the terms, First and Third Worlds and emerging markets.

a) The First World traditionally refers to the wealthier, more industrialized nations of North America, Western Europe, Japan and Australia.

b) The Third World traditionally refers to the poorer, less industrialized nations (typically known as developing nations) primarily in Latin America, Africa, and south and central Asia.

c) Emerging markets refer to countries whose products are appearing more regularly on the world market. In other words, these are countries such as South Korea, China or Brazil that are manufacturing and exporting more goods over time. These countries are typically middle-income with growing economies.

Point out the various regions of the globe that fall into these three categories. Emphasize that these categories describe the wealthier versus the poorer regions of our world.

7) Point out that while Bolivia is one of the poorest countries in South America, virtually all of Africa is poorer than Bolivia. Allow students to comment on some of their thoughts and feelings concerning the fact that our world is so starkly divided between wealthy and poor nations.

Advanced Discussion Questions

Review some of the various socioeconomic indicators introduced in *Different Countries, Different Lives*. Ask students how these indicators will tend to vary according to whether a country is categorized as First or Third World:

- GDPs per capita will be higher in the First World.
- Infrastructure will be more extensive in the First World.
- Health indicators (life expectancy at birth, infant mortality rates) will be better in First World countries.

Your Kitchen: Activity Sheet

If you think your clothes come from all over the world, wait until you look at your kitchen. What countries do these various items in your kitchen come from? Try to find as many different countries as possible:

Many Bolivian homes have outdoor brick ovens.



Item

Origin

Bread:

Chips:

Coffee:

Coffee maker:

Crackers:

Dish towels:

Dishes:

Dishwasher:

Fruits:

Fruit juices:

Microwave:

Milk:

Paper napkins:

Paper towels:

Paper plates:

Piping for sink:

Refrigerator:

Silverware:

Soda:

Tea:

Toaster:

Vegetables:

I.6. Travel Money: Introductory and Advanced Internet Exercises: Instructions

Objectives

These introductory and advanced Internet exercises familiarize students with foreign currencies and exchange rates:

- The introductory activity sheet requires students to use the Internet to look up nine types of foreign currency.
- The advanced Internet exercise teaches students to find a credible currency converter and to practice exchanging 500 American dollars for five different foreign currencies.

Introductory Activity Sheet

The countries presented in this exercise use the following currencies:

American dollar; Australian dollar; Bolivian boliviano; Danish krone; Israeli shekel; Japanese yen; Jordanian dinar; Mexican peso; Nigerian naira; Swiss franc.

Follow-Up Discussion to Advanced Internet Exercise

- 1) Ask students which foreign currency converters they found on the Internet. Why do they believe certain converters are credible?
- 2) Copy the travel itinerary chart onto the board, and call on students for the answers they found:

<u>Travel Itinerary</u>	<u>Amount Sold</u>	<u>Amount Purchased</u>	<u>Local Currency</u>
Canada	U.S. \$500.00	_____	Canadian dollars
Belgium	U.S. \$500.00	_____	European euros
Switzerland	U.S. \$500.00	_____	Swiss francs
Jordan	U.S. \$500.00	_____	Jordanian dinars
Japan	U.S. \$500.00	_____	Japanese yen

- 3) Did everyone come up with roughly the same answers?
- 4) Discuss with students how exchange rates are established:

Generally, there are no regulations or laws establishing the price of a currency. (There are some exceptions. See below.) Instead, banks usually compete with each other for the best price possible from their customers — just as stores compete with each other to sell their products to customers.

The price of money, like the price of other commodities — shoes, bananas, bicycles — largely depends upon what people are willing to pay. The price of a bottle of orange juice can only go so high; eventually customers are not willing to pay any more, or other stores are willing to sell for less. The exchange rate that a bank offers for foreign currency works very much the same way.

Advanced Discussion Question

Have any students heard of fixed versus floating exchange rates? Can anyone explain the difference?

Floating exchange rates follow the market mechanisms described in question four above.

Fixed exchange rates, or pegged rates, are rates set and maintained by a country's central bank. A set price is compared against a major world currency, such as the euro or the dollar. Sometimes, small countries will chose to peg their currencies to a major currency.

Between 1870 and 1914, all exchange rates were pegged and linked to the price of gold. This so-called gold standard was abandoned in World War I and never re-established.

Travel Money: Introductory Activity Sheet

The American dollar is one of the most famous kinds of “currencies,” or monies, in the world, but actually most countries in the world have their own money. Use the Internet to research your answers, and fill in the blanks below with the right type of money for each country.



The Bolivian Rancher's Bank.

- 1) In the United States, you have to buy donuts with **dollars**.
- 2) In Mexico, you have to buy peanuts with _____.
- 3) In Japan, you have to buy your yarn with _____.
- 4) In Bolivia, you have to buy baseballs with _____.
- 5) In Jordan, you have to pay for dinner with _____.
- 6) In Israel, you have to buy shoes with _____.
- 7) In Switzerland, you have to buy franks with _____.
- 8) In Nigeria, you have to buy nectarines with _____.
- 9) In Denmark, you have to buy crackers with _____.
- 10) In Australia, you have to pay the doorman with _____.

Travel Money: Advanced Internet Exercise

Suppose you were traveling to Tokyo on business. In order to take the taxis, pay for your meals, shop for souvenirs, and otherwise spend money in Japan, you would have to use the Japanese currency, the yen.

How would you find yen? Where do they come from?

Well, you could actually go to the bank and exchange your usual American dollars for Japanese yen:

- ➔ You “sell” your dollars to the bank in order to “buy” yen.
- ➔ The bank “buys” your dollars from you and “sells” you yen.
- ➔ The price for buying and selling currency is called the “exchange rate.”

1) On the Internet, find a foreign currency converter. There are many. Choose a converter that seems like a quality one to you: Maybe it is offered by a famous bank that you’ve heard of. Maybe it is hosted by a respectable news source like Yahoo News or CNN. Maybe it has a date on it that shows that it is using today’s exchange rates. Explain why you think your currency converter is a reliable one:

2) Imagine you are going on a round-the-world trip to five different countries. You plan to spend 500 American dollars in each country. For each country you are visiting, how much local currency can you purchase for 500 U.S. dollars? Use the Internet currency converter to find out:

<u>Travel Itinerary</u>	<u>Amount Sold</u>	<u>Amount Purchased</u>	<u>of</u>	<u>Local Currency</u>
March 25: Toronto, Canada	U.S. \$500.00	_____		Canadian dollars
April 2: Brussels, Belgium	U.S. \$500.00	_____		European euros
April 5: Geneva, Switzerland	U.S. \$500.00	_____		Swiss francs
April 10: Amman, Jordan	U.S. \$500.00	_____		Jordanian dinars
April 20: Kyoto, Japan	U.S. \$500.00	_____		Japanese yen

I.7. Llamas and Lomas: Essay and Follow-Up Questions: Instructions

Objectives

This essay explores:

- How geography has likely determined the prehistoric development of agriculture.
- How the development of agriculture, in turn, has determined the rates of developments of different civilizations.

Short-Answer Questions

1) What are some of the reasons that the Fertile Crescent in the Middle East was probably the first place in the world to develop agriculture?

The Fertile Crescent had a temperate climate, two rivers, and a large array of wild plants and animals that were prone to domestication. Of any single region of the world, it offered the most advantages for developing agriculture.

2) How likely would it be to develop agriculture in Antarctica? How much does the development of agriculture depend upon the geographic environment – the climate, the local species of plants and animals?

The more hospitable the climate, and the more available species of domesticable plants and animals, the more likely agriculture is to develop in a region. Some parts of the world, such as central Australia or Saharan Africa, offer almost nothing in the way of climate, animal or plant species that is conducive to the development of agriculture. Agriculture, for example, was transplanted to Australia with the importation of non-native domesticated plants.

3) Name at least five different domestic animals, and guess where they were originally domesticated. What are some of the uses for domestic animals?

Below are some of the animals that were domesticated in different parts of the world:

- Africa: cat, donkey, guinea fowl, pigeon.
- Eurasia: camel, carp, cat, chicken, cow, duck, ferret, goat, goose, horse, pig, pigeon, rabbit, reindeer, sheep, silkworm, water buffalo, yak.
- North America: turkey.
- South America: alpaca, guinea pig, llama.

Domestic animals and their byproducts are sources of:

- Food (e.g., chickens).
- Protection (e.g., guard dogs).
- Pest control (e.g., cats).
- Clothing (e.g., wool, leather).
- Tools (e.g., bone tools are used in many parts of the world; horn cups are considered useful and ornamental).
- Labor (i.e., beasts of burden are used to plough fields or power mills).
- Transportation (e.g., horses, donkeys).
- Raw material for commercial products (e.g., glue, animal feed, fertilizer).

4) Name at least five different domestic plants, and guess where they were originally domesticated. What are some of the uses for domestic plants?

Below are a few of the plants that were domesticated in different parts of the world:

- Africa: sorghum, African rice, yams, watermelon, okra.
- Eurasia: rice, wheat, barley, peas, carrots, beets, olives, cucumbers, peaches, apricots, lettuce, onions, almonds, grapes.
- North America: corn, lima beans, chili peppers, tobacco, pumpkin, tomatoes.
- South America: quinoa, manioc, squash, tobacco, sweet potato, cacao, potatoes, avocado, pineapple.

Domestic plants and their byproducts are primarily sources of food. In addition, plant oils are used for cooking; spices are used to flavor and preserve foods.

Fibrous plants, such as cotton or hemp, are used for cloth and twine, respectively. In early history, the gourd was also highly significant as a container. Both wild and domestic plant products are also used as medicines. Today, some plant oils, such as soy and rape oil, are used as biofuels.

Advanced Discussion Question

How do you think the domestication of plants and animals might have caused ancient peoples thousands of years ago to change their way of life?

Domestication and, with it, the development of agriculture are considered the two precursors to a sedentary lifestyle.

Crops, in particular, required people to stay in one place and to tend their crops, thus abandoning a hunter-gatherer way of life.

Some animals may be herded, and there are groups of nomads, particularly in the Middle East, who migrate regularly with their herds. In other cases, ancient people penned their animals, supplemented animals' diets with domestic feed, and took up sedentary lifestyles.

Additional Reading for Teachers and Advanced Students

The book by Jarred Diamond, *Guns, Germs and Steel: The Fates of Human Societies*, provides a robust, multidisciplinary explanation of how the geographic precursors to agriculture have, in many ways, determined the relative pace of the development of civilization in different societies. The book is written at the college level.

Llamas and Lomas: The Evolution of Agriculture

Archeologists trace the “dawn of civilization” back to the evolution of agriculture. In the dictionary, “civilization” refers to a system of living where people settle in fixed locations – cities, villages and towns – and rely upon trade with one another in order to meet their basic needs. Agriculture refers to the deliberate cultivation of plants and animals for food and other purposes.



A llama treks across an Andes plain.

Agriculture developed independently in different parts of the world at different times. Today, most scholars agree that agriculture first arose over 12,000 years ago in Eurasia in the Fertile Crescent, a region in the Middle East today known as Iraq. Blessed by water from the Tigris and Euphrates rivers, with a temperate climate, and with many native species of plants and animals that were suited for domestication, the Fertile Crescent was a likely place for early peoples to begin settling into permanent villages and towns. They could trust that they would be able to utilize the local resources of land, water, plants, and animals and would not have to wander – hunting and gathering – in search of their food.

In ancient times, other regions of the world also developed their own forms of agriculture. The plants and animals that they domesticated, and the systems of field cultivation and irrigation that they developed, depended upon the resources available in their particular environments.

In South America, in the Andes, the Incas carved their mountains into tiers, or layers, in order to grow crops on the earth’s otherwise too angular surface. They used the rocks from the mountains to build rows upon rows of stone walls to keep their layers of crops in place. In other parts of South America, in the Amazonian lowlands, the native people developed a different system of agriculture called raised field agriculture. By constructing raised mounds of dirt, known as “lomas” in Spanish, early farmers were able to grow crops on land that flooded on a regular basis. Without the lomas, the planted seeds and the young crops would have washed away during each rainy season. With the raised lomas, the crops survived.

Which plants and animals people cultivated in each region of the world depended entirely upon the native species available to them. Barley was cultivated in the Middle East; in east Asia, rice; in North America, different species of squash; in South America, multiple types of potatoes. Some regions of the world were fortunate to have more types of native domesticable plants and animals than other regions. Eurasia, for example, offered its human inhabitants many large species of animals to domesticate, including cattle, horses, camels and donkeys as well as smaller animals such as sheep, goats and chickens. In the

Americas, the largest domesticable animals were the South American llamas, alpaca, and vicunas. Of these, the largest, the llama, is a bit smaller than a donkey and not as fast or as strong. North America, despite its temperate climate, had very few native plants and animals that could be domesticated.

Compared to Eurasia, both North and South America experienced geographical disadvantages to the ancient development of agriculture. In modern times, South America's geography continues to demand a deep respect for nature and to slow attempts at industrialization: South America claims one of the largest and highest mountain ranges in the world; has tens of thousands of square miles of thick forests and of non-navigable waterways; and is home to vast plains that can be frozen, tropical, rain-soaked or desert.

Jarred Diamond, the author of *Guns, Germs, and Steel*, has carefully considered why civilizations have developed at different rates in different parts of the world, and he links this progression to agriculture. Diamond believes that as early Eurasians civilizations evolved, they enjoyed many advantages. Their enormous continent was more agriculture-friendly due to: climate; the number of domesticable plants and animals; large areas of arable land; fewer mountains and deserts; and a geography that allowed species to spread across the continent without dramatic changes in climate.

These advantages allowed Eurasian civilizations to develop much more quickly than those in other parts of the world. When the Spaniard, Francisco Pizarro decided to invade the Inca empire of South America in 1531, his victory, according to Diamond, was certain: The Europeans, so used to living in large cities, brought with them the disease, smallpox; smallpox spread death among the Indians while the Spaniards were largely immune. The Spaniards had horses; the Incas, only llamas. The Spaniards had the advantage of technology from all of Eurasia; they could use gunpowder, invented in China, while the isolated Incas could not. It is all too easy wrongly to attribute the quick conquest of the Incas to poor politics or a limited understanding of warfare. Actually, the Incas were intelligent politicians and fierce warriors. According to Diamond, geography probably played the strongest role in the destinies of these two civilizations.

Llamas and Lomas: Short-Answer Questions

- 1) What are some of the reasons that the Fertile Crescent was probably the first place in the world to develop agriculture?
- 2) How likely would it be to develop agriculture in Antarctica? How much does the development of agriculture depend upon the geographic environment — the climate, the local species of plants and animals?
- 3) Name at least five different domestic animals, and guess where they were originally domesticated. What are some of the uses for domestic animals?
- 4) Name at least five different domestic plants, and guess where they were originally domesticated. What are some of the uses for domestic plants?