

## **Virginia's Role in the Global Economy: A Global Trade Simulation Lesson Plan**

Target Audience: 12<sup>th</sup> grade government students  
Length: 2 days (45—minute classes)

### **Objectives**

The students will:

1. Participate in a global trade simulation while analyzing and making decisions about trading.
2. Create an economy that can compete in an international market.
3. Use charts and graphs to identify products that Virginia exports.
4. Use charts and graphs to identify countries and regions that receive exports from Virginia.
5. Describe the interdependent relationship between Virginia and the global economy.

### **1. Overview**

Students will be introduced to the nature of world trade through a trade game simulation. Through this simulation, students come to understand that some countries have abundant resources, while others are in need of goods and services. The abundance and need of goods and services highlights the importance of trade and the need for global markets. In addition, students will examine charts from the Virginia Economic Development Partnership (VDEP) that provide the most recent data on Virginia's exports. Through the analysis of this information, students will better understand the relationship of Virginia to the global economy.

### **2. Activities**

#### **Day 1**

#### ***Preparation for Global Trade Simulation***

- Print the Handout #1: *Global Trade Simulation Teacher Directions* and obtain all the required simulation materials.
- Follow instructions in Handout #1: *Global Trade Simulation Teacher Directions*, which explains how to make country folders and trading units that students will use to trade during the simulation.

#### ***Activity 1 – Global Trade Simulation***

- Give students copies of Handout #2: *Global Trade Simulation* and Handout #3: *Trade Game Score Tally Sheet*.
- Before trading begins, give students a chance to familiarize themselves with the directions, their resources, and prepare a strategy for trading with other countries.
- Have students follow instructions in Handout #2: *Global Trade Simulation* to guide the trading process.

**Activity 2—Group Discussion after the Simulation**

- After the simulation is complete, give teams time to complete Handout #4: *Global Trade Simulation Group Debriefing Question*.
- After teams have completed the handout, have a class discussion in which groups share their responses.

Note: The original core concept, design, and basic strategy of this game was first observed and secured with many teachers at the 1988 National Council of Social Studies in Orlando, Florida. Since then, Joe LaRocco of Roanoke County Public Schools has modified it many times over the years for classroom and conference use. This game is his modification of the original trade simulation lesson from the conference.

**Day 2**

**Activity**

- Distribute Handout #6: *Primary Source Analysis Questions* and Handout #7: *Primary Sources Virginia Economic Development Partnership Data*.
- After students have completed Handout #6, discuss the answers as a class.

**3. Background Information**

In order for any country or state to survive in the global economy, they must actively take part in the trading of goods and services.

Virginia has a rich history in trading goods with other countries. Starting with Virginia's early colonial history by trading exports and imports for the British Empire, Virginia has grown greatly in trade with countries all over the world. While tobacco and other agricultural products contribute greatly to Virginia's total export markets, industrial and other modern products have greatly increased Virginia's wealth and standing in the trading community. By the 1980's, the global economy became a great deal more competitive. Virginia's governors, legislatures, and business leaders responded in many ways by helping Virginia grow in export markets.

All countries and states strive to achieve a "favorable balance of trade." This is when a country's export values exceed their values of imports. When a country imports more goods and services than it exports, this is known as a "trade deficit."

Thankfully, Virginia has been on the upswing in the export markets for the last twenty years. Through a series of actions by the state government, and in partnership with the many firms and schools of business in the state university system, Virginia has surged in exporting its goods and services all over the world.

Why is global trade, especially exporting, so important? According to VEDP, the Foreign Trade Division of the Census Bureau, and the Bureau of Economic Analysis of the Commerce Department, Virginia's exporting facts include:

- As of February 2009, export-supported jobs accounted for 3.2% of Virginia's total private sector jobs.
- As of 2006, over 15% of all manufacturing jobs in Virginia were dependant on export markets.

- In 2006, over 4500 Virginia companies exported goods all over the world. 83% of these were small businesses which employed fewer than 500 workers.
- Foreign controlled companies in Virginia employed one of every eight manufacturing workers.
- Virginia's exports in 2008 totaled approximately \$18.9 billion compared to the \$12.6 billion in 2004.
- In 2005, Virginia ranked 23<sup>rd</sup> among the 50 states in exporting.
- According to the BEA, in 2007, Virginia's Gross Domestic Product (GDP) was approximately \$382,964,000,000.
- Exporting directly contributes about 5% percent of the state's GDP. Spin off economies and businesses that are related to the export markets add a great deal more to this figure (\$18.9 billion divided by the GDP of Virginia).

#### **4. Conclusion**

As stated previously, Virginia is very active in the global economy. Trade is the lifeblood of any modern economy. Many states depend on Virginia's goods, and in turn we import billions of dollars worth of goods that help Virginians and Americans live better lives. In turn, these exports and imports create billions of dollars of economic opportunity for our residents. The world markets offer many goods and services that we can enjoy. The world also enjoys and buys many of the goods and services that our Commonwealth has to offer.

Virginia's government has many state and private agencies to help large and small businesses participate in the ever changing and increasingly more competitive world markets. Virginia Economic Development Partnership is one such agency as shown with the information provided. Students need to be aware that there are good jobs and career opportunities in the world of the global economy. Virginia's government agencies, school systems, and business partnerships help better prepare the students to compete in the new economic era.

#### **5. Differentiation**

This lesson is designed for twelfth grade government classes on any level.

#### **6. SOL Skills**

The student will demonstrate mastery of social studies citizenship skills including the ability to

- create and interpret maps, diagrams, tables, charts, graphs, and spreadsheets (GOVT.1b);
- identify a problem, weigh the expected costs and benefits and consequences of proposed solutions, and recommend solutions using a decision making model (GOVT.1f).

#### **7. SOL Content**

The student will demonstrate knowledge of the process by which public policy is made by

- examining different perspectives on the role of government (GOVT.9a).

The student will demonstrate knowledge of the role of the United States in a changing world by

- examining the relationship of Virginia and the United States in the global economy (GOVT.12c);

- examining recent foreign policy and international trade initiatives since 1980 (GOVT.12d).

The student will demonstrate knowledge of the United States market economy by

- analyzing global economic trends and the relationship of Virginia and the United States economy (GOVT.15f).

## **8. Materials**

- Handout #1: *Global Trade Simulation Teacher Directions*
- Handout #2: *Global Trade Simulation*
- Handout #3: *Trade Game Score Tally Sheet*
- Handout #4: *Global Trade Simulation Group Debriefing Questions*
- Handout #5: *Global Trade Simulation Situations Cards*
- Handout #6: *Primary Source Analysis Questions*
- Handout #6A: *Primary Source Analysis Questions Answers*
- Handout #7: *Primary Sources Virginia Economic Development Partnership Data*

## **9. Sources**

- Virginia Economic Development Partnership Virginia Government Homepage—<http://www.yesvirginia.org/whyvirginia/default.aspx>
- The Official Commonwealth of Virginia Homepage— [www.virginia.gov/](http://www.virginia.gov/)
- Revised Origin of Movement State Exports Series, Bureau of the Census, Foreign Trade Division—[http://ita.doc.gov/td/industry/otea/state\\_reports/virginia.html](http://ita.doc.gov/td/industry/otea/state_reports/virginia.html)
- Bureau of Economic Analysis—<http://www.bea.gov/regional/gsp/action.cfm>

## **Global Trade Simulation Teacher Directions**

### **INTRODUCTION**

In this simulation, the students will work as a team representing a *fictional* country. Over a series of turns, they will trade for goods and resources they need to be competitive in an international market. They will set goals at the start of the simulation, and then at the end of the simulation evaluate how many goals they achieved.

### **TRADE GAME MATERIALS NEEDED**

1. Manila folders—one folder for each team of three to five students. Each folder represents a different country; the game works best if there are at least three countries.
2. Use three by five index cards, or card stock, to make nine slots to hold trade unit slips in each folder. The three by five index cards will also be used to make situation cards.
3. Make copies of the Handout #3: *Trade Game Score Tally Sheet* and place one in each team folder.
4. Buy a package of mailing dots—with several colors in each package. Each team member will have the same color dot.

### **FOLDER PREPARATION**

1. Each folder represents a fictional country's trading capability and worth. Having different colored folders for each country is helpful in distinguishing between the teams.
2. Cut the index cards in half and tape three of them in a row on the inside of the manila folder. Make three rows of these cards for a total of nine slots.
3. Label each slot with the name of one of the nine trade goods.
4. Make copies of the trade units (located in this packet) on colored sheets of paper and cut into individual trade units. Or, write the names of the trade units on colored construction paper and cut into pieces (2" x 3/4"). Put similarly colored units into the appropriate slots.
5. You will need to make a lot of extra pieces of the various units. Keep the extras in nine different envelopes marked with the appropriate name of the resource units they hold.
6. Each slip of paper is one unit. The value of the units is listed on Handout #3: *Trade Game Score Tally Sheet*.
7. Use a variety of resources and in different amounts for each country; for example, a wealthy oil country might have twenty oil units and few units for food, while another country might have the opposite situation. Other countries may have very few total resources, while others, like the United States, have a lot of most resources.

Each folder will look similar to this:



Game color suggestions include:

Oil/Coal	Black
Gold	Yellow
Food	Green
Grains	White
Iron	Red
Timber	Brown
Minerals	Purple
Technology	Grey
Machines	Blue

If construction paper is used to make the trade units, these same colors may be used.

**Trade Units**

<b>GOLD</b>	<b>GOLD</b>	<b>GOLD</b>
<b>OIL / COAL</b>	<b>OIL / COAL</b>	<b>OIL / COAL</b>
<b>TECH</b>	<b>TECH</b>	<b>TECH</b>
<b>MINERALS</b>	<b>MINERALS</b>	<b>MINERALS</b>
<b>TIMBER</b>	<b>TIMBER</b>	<b>TIMBER</b>
<b>TECHNOLOGY</b>	<b>TECHNOLOGY</b>	<b>TECHNOLOGY</b>
<b>IRON</b>	<b>IRON</b>	<b>IRON</b>
<b>FOOD</b>	<b>FOOD</b>	<b>FOOD</b>
<b>GRAINS</b>	<b>GRAINS</b>	<b>GRAINS</b>

8. Sample trade set-ups:

- Create fictional countries to have a more realistic application of global trade.
- Many countries do not have adequate trade resources, while a few countries have resources in abundance. Most countries in the world have some shortages in certain areas and surpluses in others.
- Here are a few countries with the suggested number of trade units that may apply.
- These numbers can be adjusted when creating a fictional country.
- NOTE: The simulation works better if the students do not know what country they are role playing. They can try to guess a country they best reflect at the end of the game.

Country	Oil/Coal	Gold	Tech.	Minerals	Machines	Timber	Iron	Food	Grain
U.S.A.	8	15	10	15	25	15	15	15	20
Haiti	1	1	3	3	2	5	2	2	3
Germany	5	10	9	10	15	10	10	15	15
Russia	15	7	5	15	10	15	10	7	8
S. Arabia	25	20	7	2	10	2	2	10	3
Japan	2	5	10	2	15	3	3	7	8
Vietnam	2	2	3	3	5	3	4	5	9
Mexico	10	5	3	7	3	5	5	5	7
Kenya	3	4	4	5	4	7	5	4	5
Great Britain	5	5	4	4	6	3	4	5	9
Yemen	1	3	2	5	2	3	2	4	4

9. To make the game more interesting, use Handout #5: *Global Trade Simulation Situations Cards*. The *positive* and *negative* “situations” cards are similar to “chance cards” from the game *Monopoly*. Using three by five index cards, the teacher can write or print individual situations. Between trade turns, each team will receive a situation card.

The positive situations include:

- A gold strike in the country is discovered—gain five units of gold.
- A new discovery of oil in the country—gain five units of oil/coal.
- A bumper crop of food—gain ten units of grains and five units of food.
- A favorable peace treaty is signed—gain two units of everything.
- New discoveries are wanted by other countries around the world—gain five technology units.

The negative situations include:

- A severe drought and famine have hit the country—lose half of your food and grains.
- Civil war breaks out—lose half of your oil/coal and gold.
- A tidal wave wipes out the coastal areas—lose five units each of gold, food, oil/coal, and machines.
- A terrorist attacks the country—lose two gold and two oil/coal units.



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## Global Trade Simulation

### INTRODUCTION

In this simulation, you will work as a team representing a *fictional* country. Over a series of turns, your team will trade for goods and resources you need for your country to be competitive in an international market. Your group will set goals at the start of the simulation, and then at the end of the simulation evaluate how many goals you achieved.

### BEFORE THE TRADING BEGINS.....

1. Form teams of three to five students. To identify the members of your team, each member will wear the same color mailing dot on his/her wrist or shirt.
2. Review the contents of your trade folder given to the team by the teacher.
3. Complete the following tasks using the *Trade Game Score Tally Sheet*:
  - Count the number of units in each slot and write the number in the “Units” column.
  - Multiply the number of units by the trade value of the product.
  - Put the product value in the “Value” column. For example, if a team has five gold units, put a “5” in the “Units” column and a “50” in the “Value” column.
  - Add each of these nine values to come up with the total trade value of your country.
  - Be sure to put all the units back in their slots.
4. Now, evaluate what your country has a lot of and what you need to secure to create a competitive economy.
5. Based on the evaluation, determine goals for the resources you need to trade and gain to create a competitive economy.
6. It is perfectly acceptable to trade up or down to make one of your goals. So, if your country can get more food by trading oil and coal for seven points as opposed to nine, that is acceptable.

### THE TRADING PROCESS

1. Your team will have three minutes to conduct trade with another country. There will be at least four trading sessions.
2. There will be one minute between trades. During this time, the team will evaluate gains and losses and decide whether or not to honor the negotiated terms.
3. Each team can determine whether or not they will let the other teams see what they have to trade.

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4. Between each trading session, the teacher will give your team a “situation card” describing a positive or negative situation for your team to address. Your group might receive more than one situation card during the simulation.
5. If your team receives a positive situation card, a representative from the team will go to the teacher who will then give the team member the trade units as indicated on the card.
6. If your group receives a negative situation card, the team must surrender the appropriate number of trade units to the teacher.

### **RULES OF THE GAME**

1. Team members can only talk to members of their team.
2. When trading with the other country, use gestures, motions, or point to the trade objects. Not being able to talk emphasizes the need to know many languages in world trade.
  - Your teacher may penalize teams who talk to non-team members by taking away one or more trading units.
3. At least one student should stay at the “home” country while the others are trading.

### **WHEN TRADING IS DONE**

1. At the end of trading, add your team’s units and their value and record the values on the *Trade Game Score Tally Sheet*.
2. As a group, complete Handout #4: *Global Trade Simulation Group Debriefing Questions*.

Name \_\_\_\_\_  
Period \_\_\_\_\_ Date \_\_\_\_\_**TRADE GAME SCORE TALLY SHEET**

RESOURCE	VALUE	UNIT / VALUE	GOAL	FINISH + / - VALUE
GOLD	10	_____/_____	_____	_____/_____
OIL/COAL	9	_____/_____	_____	_____/_____
TECHNOLOGY	7	_____/_____	_____	_____/_____
MINERALS	6	_____/_____	_____	_____/_____
MACHINES	5	_____/_____	_____	_____/_____
TIMBER	4	_____/_____	_____	_____/_____
IRON	3	_____/_____	_____	_____/_____
FOOD	2	_____/_____	_____	_____/_____
GRAINS	1	_____/_____	_____	_____/_____
<b>TOTALS</b>		_____/_____		_____/_____

How to use this sheet:

1. At the start of the game, look into each of the slots.
2. Carefully count how many units of each you have. Then multiply the number of units by the value of each. For example, if you have five units of oil/coal, then put a "5" in the "units" column, and the value of each unit is 9, so  $9 \times 5$  is 45, so place a 45 in the "value" column.
3. Add up the total number of units and the total value of your trade.
4. At the end of the game, repeat the procedure, and see how many of the nine goals you achieved.
5. What were your gains?
6. What were your losses?

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## Global Trade Simulation Group Debriefing Questions

**Directions:** Answer these questions as a group. Be prepared to share your responses with the class.

1. How many of the nine goals did your team meet?
2. Why did your overall trade value increase or decrease?
3. What country or team was most like yours?
4. Why is knowing a common language important in trading around the world?
5. Were the goals you set realistic?
  - Which were the hardest to achieve? Explain your answer.
  - Which were the easiest to achieve? Explain your answer.

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6. How did the poorer and the wealthier countries compare in being able to bounce back from a negative situation?
7. Which countries did your team tend to trade with? Explain your answer.
8. What chance did poorer countries have to compete with the wealthier countries?

## **Global Trade Simulation Situations Cards**

Use these situation cards in between trade turns and give to teams. If a team receives a negative card, they will surrender the items listed. It is possible for a team to have to surrender all of a resource. If they receive a positive card, give the team the number of resource units as indicated.

Take up the cards after each turn. They can be reissued for another turn, or they can be retired for the rest of the game. Feel free to free lance and make up additional situations as you wish.

### **SITUATION CARD**

#### **FOOD AND GRAINS INCREASED!**

**Your country has a good crop and bountiful harvest.**

**Your country has gained 10 units of grains and 5 units of food.**

### **SITUATION CARD**

#### **TERRORIST ATTACK**

**A terrorist attack has occurred in your country.**

**Your country loses five gold units and three technology units.**

**SITUATION CARD**

**TREATY RESULTS**

**A positive treaty with other countries works to your benefit.**

**Your country gains two units from all of the resources categories.**

**SITUATION CARD**

**TECHNOLOGICAL BOOM**

**Your country experiences technological gains in many industries.**

**Your country gains five technology units.**

**SITUATION CARD**

**EARTHQUAKE**

**A serious earthquake has hit your country.**

**Your country loses two units of each of the resources.**

**SITUATION CARD**

**OIL CRISIS**

**Several refineries have been closed.**

**Your country loses five units of oil/coal.**

**SITUATION CARD**

**TIDAL WAVES**

**Strong tidal waves hit some of the coastal areas.**

**Your country loses five gold, five oil/coal, five food, and three grains units.**

**SITUATION CARD**

**CIVIL UNREST**

**Recent economic and political events have gone badly.**

**Your country loses three timber, three iron, three gold, and two oil/coal units.**



**SITUATION CARD**

**DIPLOMATIC ACCORDS**

**New diplomatic relations help improve your economy.**

**Your country gains three iron, three technology, five grains,  
five food, and two oil/coal units.**

**SITUATION CARD**

**MINING and MACHINE  
IMPROVEMENTS**

**New mining and machinery developments come about.**

**Your country gains three iron and three machine units.**

**SITUATION CARD**

**GOLD!**

**A good amount of gold has been discovered in your country.**

**Your country gains five units of gold.**

**SITUATION CARD**

**OIL and COAL!**

**New deposits of oil and coal have been discovered in your country.**

**You country has gained five units of oil/coal.**

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## Primary Source Analysis Questions

1. What regions of the world receive most of Virginia's exports?
  - a. Why do you think most of the exports go to this region?
2. Examine *Virginia's Manufactured Exports 2004-2008* chart.
  - a. Between 2004—2008, which regions have increased in receiving Virginia exports every year?
  - b. Since 2004, which region has grown the most in exports received from Virginia?
3. Look at *Virginia's Top Export Products* chart.
  - a. What has happened to tobacco as an export?
  - b. How much money was made in exporting tobacco in 2006?
  - c. How much money was made in exporting tobacco in 2008?
4. Review *Virginia's Top Export Destinations* chart.
  - a. Which countries received an increase in Virginia exports between 2006—2008?
  - b. As a percentage, which country had the greatest increase in receiving Virginia exports between 2004—2008?
  - c. Which country has been the most constant and largest trade recipient of Virginia's exports?

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5. Look at the *Firms with Foreign Affiliates* chart.
  - a. Which three countries are responsible for employing the most people in Virginia?
  - b. According to the chart, what percent of the total workforce directly resulting from foreign countries' firms come from these three countries?
6. How many trade products from the trade simulation does Virginia have?
  - a. Are any of the products exported?
  - b. Based on the charts provided, where are the products exported?

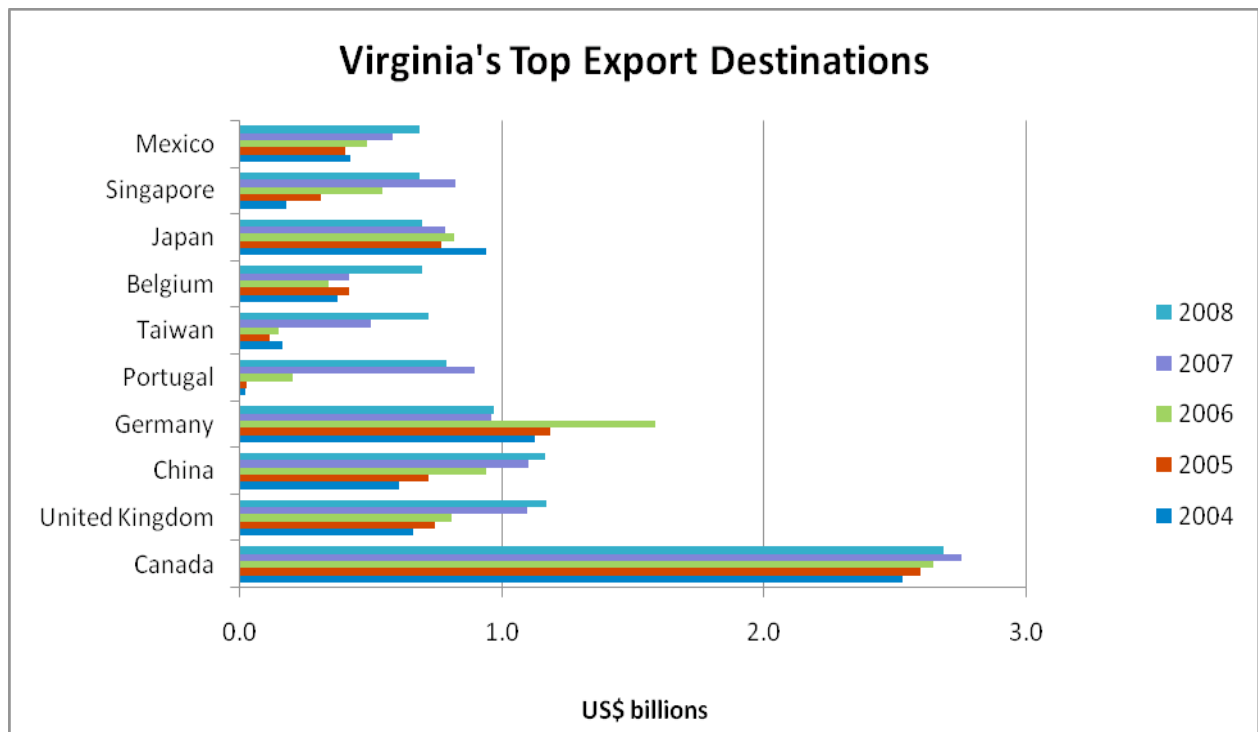
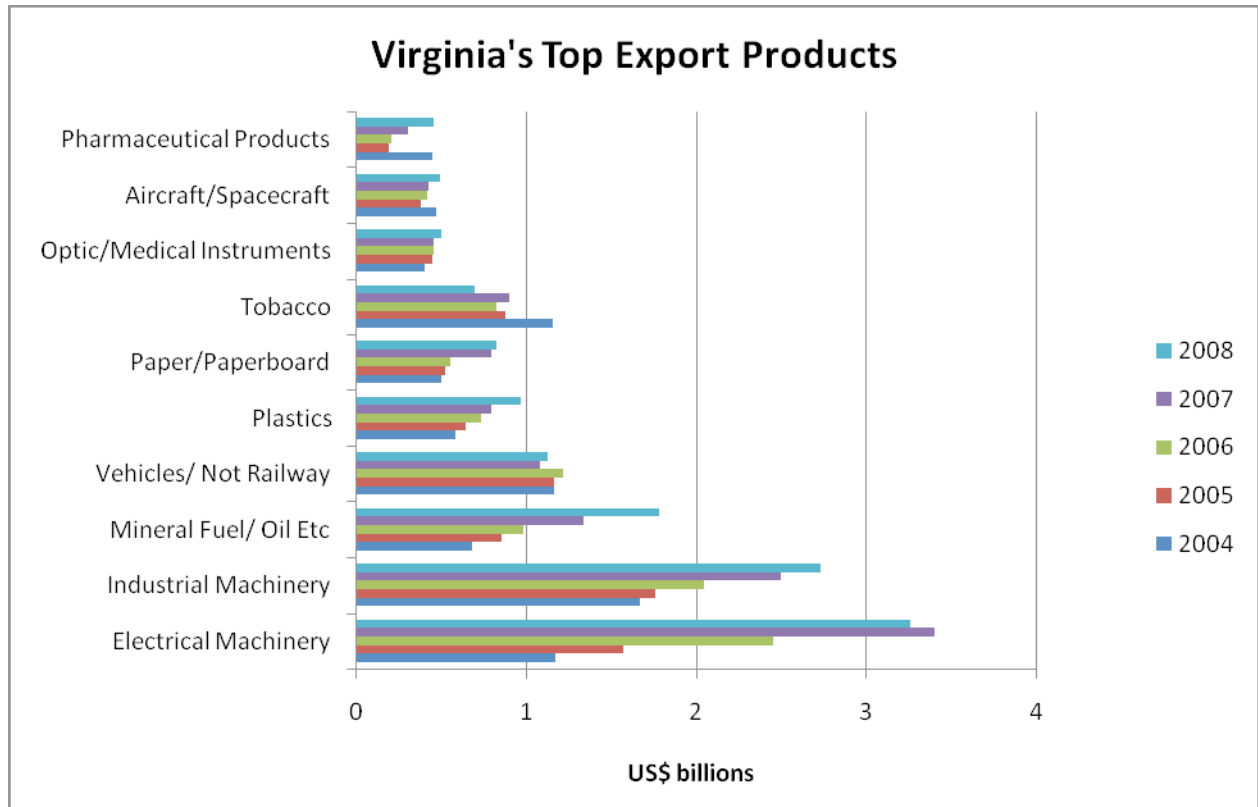
## Primary Source Analysis Questions Answers

1. European Union
  - a. There are hundreds of millions of people in the EU countries that have a lot in common in terms of lifestyle, and desire to have goods and services enjoyed by the people of the United States. Many of them have incomes and jobs similar to our own.
2.
  - a. EU 27, NAFTA, South America, Africa, South and Central Asia.
  - b. In 2004, the EU 27 imported just under four billion dollars from Virginia. In 2008, it increased to about six billion, two hundred-fifty million dollars.
3.
  - a. It has declined in dollar value.
  - b. In 2006, over one billion dollars in tobacco exports were recorded.
  - c. In 2008, tobacco exports declined to about three—quarters of a billion dollars. Many tobacco farmers are getting out of the tobacco business and tend to go into other crops or else sell their lands to other businesses. The cost of tobacco acreage is also increasing. America has stepped up its “no smoking” campaigns.
4.
  - a & b. Portugal had the largest percentage gain.
  - c. Canada has been our most constant partner.
5.
  - a. Firms from the United Kingdom, Germany, and Japan employed over 33,000 people.
  - b. Forty-six percent of the jobs that came from foreign companies located in Virginia.
6.
  - a. Three—technology, machines, and minerals
  - b. & c. Manufactured goods are exported to the EU.

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## Primary Sources

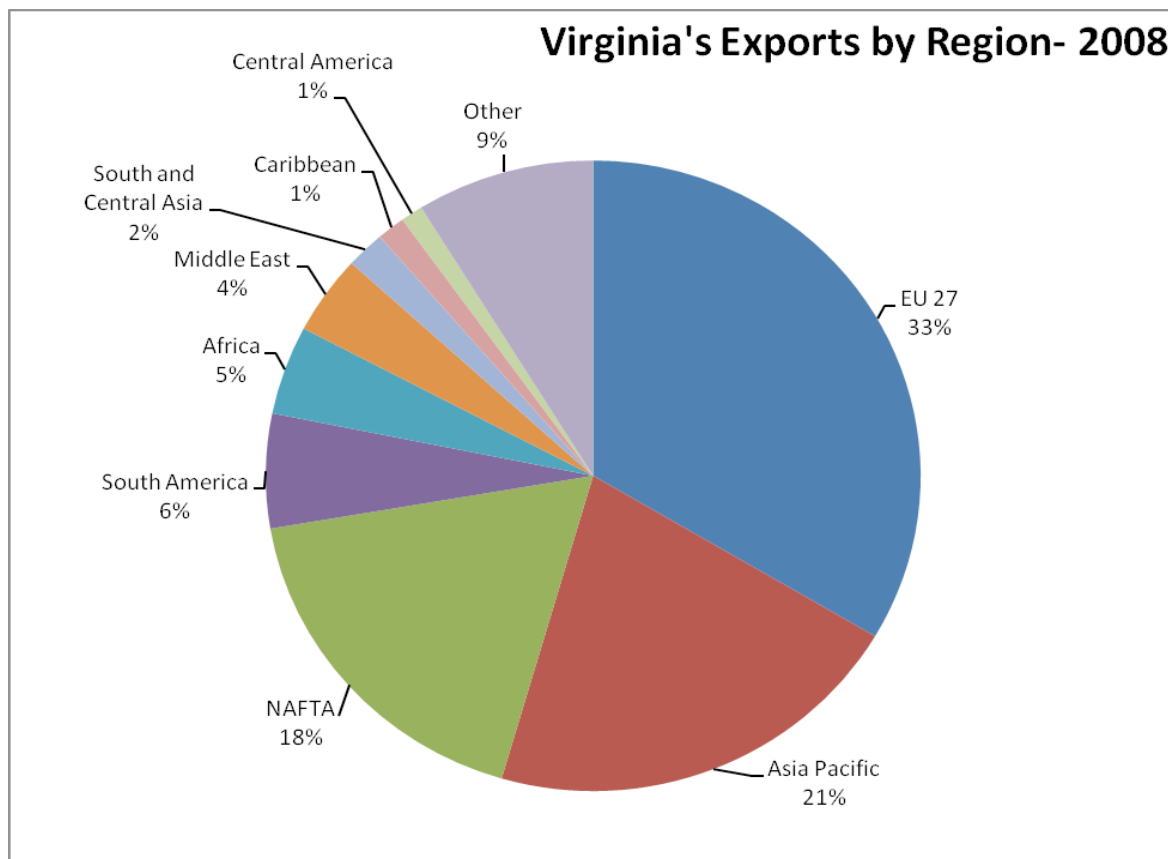
### Virginia Economic Development Partnership Data



Name \_\_\_\_\_

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**The regions below are defined by the United Nations**



Name \_\_\_\_\_

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**Firms with Foreign Affiliates**

There are more than 800 companies from around the world with a presence in Virginia. These companies support over 72,000 jobs in the Commonwealth.

Country	Number of Companies	Employment
United Kingdom	132	12,690
Germany	126	10,205
Japan	86	10,751
Canada	65	4,651
France	59	5,917
Netherlands	42	1,678
Switzerland	38	2,088
Sweden	37	6,668
Australia	21	609
India	21	4,013
Italy	21	1,645
Israel	16	1,403
Denmark	15	727
Austria	14	1,028
Korea	12	117
Mexico	9	1,123
Norway	8	209
China	7	89
Finland	7	178
Ireland	7	194
Belgium	6	1,277
Brazil	6	141
Iceland	6	1,148
Spain	6	171
Greece	5	490
South Africa	4	84
Hong Kong	3	13
Luxembourg	3	171
Singapore	3	225
Turkey	3	9
Liechtenstein	2	22
New Zealand	2	1,306
Taiwan	2	76
Bermuda	1	484
Chile	1	480
Egypt	1	0
Lebanon	1	14
Monaco	1	0
Philippines	1	8
Poland	1	813
Portugal	1	6
Romania	1	0
Russia	1	0
Saudi Arabia	1	7
Total	805	72,928