#### **Delaware Recommended Curriculum**

This unit has been created as an exemplary model for teachers in (re)design of course curricula. An exemplary model unit has undergone a rigorous peer review and jurying process to ensure alignment to selected Delaware Content Standards.

Unit Title: Reasons for Regions

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**Delaware Geographic Alliance** 

**Content Area:** Social Studies

Grade Level: 6

#### **Summary of Unit**

This unit for 6<sup>th</sup> grade develops the concept of regions by introducing to students to the idea of economic regions - areas where people engage in similar economic activities. Students learn how people use land, and how the choices they make about how to use the land result in patterns of functional regions. In earlier grades, students have been introduced to regions as helpful mental constructs that people use to better understand their surroundings. The concepts of shared characteristics of places in an area and the importance of establishing boundaries and borders have been established. They have explored regions based on factors like political control, climate, topography, and cultural factors. They have learned to place their local town or community in the context of other regions. They have studied the local community to understand its characteristics, borders and connections. This unit will introduce a more formalized study of regions, with a particular focus on economic regions and specialization.

There are at least three different types of regions that students should understand:

- formal (where the defining features of the region extend uniformly from border to border, such as a legal/political region);
- functional (where the defining characteristic of the region is strongest in the center and becomes less evident towards the edges, such as the reception area for a TV station);
- perceptual (a region that exists only in the mind, such as "the South" or "the Far West" with no agreed-upon boundaries).

Economic activities are usually defined in terms of functional regions where the edges are zones rather than single lines. Students should recognize that economic regions are increasingly based on specialization, such as Central Valley of California, known for its Mediterranean agricultural products. Specialized regions can be altered by changes in transport technology or politics. For instance, Australia was once a producer of wool until refrigerated ships allowed meat to be supplied to United Kingdom markets. But when the U.K. joined the European Union, market preference was reduced and Australia has now become part of the Asian region, supplying countries such as Japan with needed minerals.<sup>1</sup>

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 $<sup>^{1}\,\</sup>underline{\text{Understanding the Geography Standards}}$ 

## Stage 1 – Desired Results

What students will know, do, and understand

#### **Delaware Content Standard**

**Geography Standard Four 6-8a:** Students will understand the processes affecting the location of economic activities in different world regions.

#### CCSS.ELA-Literacy.RH.6-8.2

Determine the central ideas or information of a primary or secondary source; provide an accurate summary of the source distinct from prior knowledge or opinions.

## CCSS.ELA-Literacy.RH.6-8.4

Determine the meaning of words and phrases as they are used in a text, including vocabulary specific to domains related to history/social studies.

### CCSS.ELA-Literacy.SL.6.4

Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.

### CCSS.ELA-Literacy.SL.6.1.d

Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.

#### CCSS.ELA-Literacy.WHST.6-8.7

Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.

#### **Big Ideas**

- Regions
- Land use
- Economic activity
- Economic specialization

#### **Unit Enduring Understandings**

- A region is a concept rather than a real object on the ground, used to simplify the diversity of places.
- Economic activities often produce regional patterns of land use.

#### **Unit Essential Questions**

- To what degree are economic regions specialized?
- What's "special" about a given region and how could it change?

#### **Knowledge and Skills**

Students will know...

- Types of regions (formal, functional, perceptual) and characteristics of each
- Types of land use: agricultural, residential, commercial, industrial, public use

- Location and value of important concentrations of world resources (Oil reserves, coal, lumber, various agricultural crops)
- Principle types of economic activity (mining and ranching, farming, fishing, manufacturing, retail and marketing)
- Advantages and disadvantages of economic specialization

#### Students will be able to...

- Provide examples of types of regions
- Identify typical patterns on the landscape produced by various economic activities
- Provide examples of regions that specialize in certain economic activities
- Interpret maps and geo-graphics to gather information about resources and economic activity
- Compare two regions in terms of specialization

#### Stage 2 – Assessment Evidence

Evidence that will be collected to determine whether or not Desired Results are achieved

#### **Transfer Task**

This summative assessment is a transfer task that requires students to use knowledge and understandings to perform a task in a new setting or context. The assessment and scoring guide should be reviewed with students prior to any instruction. Students should complete the assessment after the lessons conclude.

#### **Essential Question addressed by the transfer task:**

• What's "special" about a given region and how could it change?

#### Prior Knowledge

Now that you have learned about specialized economic regions, you are ready to apply your learning to compare two economic regions. Use the information provided and your knowledge of economic regions to demonstrate your skill and understanding of this topic.

## Problem and Role

You are one of several contributing editors to an online student magazine called *World Connections*. The magazine focuses on economic specialization and trade connections. The staff at World Connections has provided you with a <u>research</u> packet and a comparison chart<sup>2</sup> for two different regions: the Arabian Peninsula with the Delmarva Peninsula.

As an editor, you help with the selection of articles to be published in World Connections. All articles must go through an editorial process of fact-checking and analysis. Your job as a contributing editor will be to provide the analysis for the <a href="research packet">research packet</a> developed by the staff at World Connections. This analysis will give the writers of the article a basis for their publication.

#### Performance

You and your fellow editors will hold a meeting to review the compare the two economic regions as they are today - their land and climate, the advantages and disadvantages of the specialty they have chosen. For each region, you should point out some possible changes that could affect the region. You should make recommendations on how people of the region can avoid possible problems in the future.

### Criteria

Your meeting discussion should include a clear analysis of these two specialized economic regions. Use the facts in the research packet to support your statements.

 $<sup>^2</sup>$  This reading has a <u>lexile measure</u> of 970, appropriate for the Common Core State Standards 6-8 grade cluster.

Use your completed chart as a reference during the meeting. Remember that your chart is likely to be published as an inset in the magazine, so it should be completed clearly.

## **Transfer Task Rubric**

Student Expectations	Meets	Approaches	Not Yet
Prepares for meeting with completed comparison chart			
Asks relevant questions			
Elaborates on the remarks of others			
Presents valid claims and findings about regions and economic specialization			
Refers to prior knowledge or evidence about regions and economic specialization			
Uses content-appropriate descriptions, facts, and details to accentuate main ideas or themes			
Uses appropriate eye contact, adequate volume, and clear pronunciation			
Promotes collegial discussions			

#### **Teacher Notes:**

The completed comparison chart can be used for assessment of individual student performance. This rubric is designed to measure student performance for **Geography Standard Four 6-8a** and the **ELA CCSS Speaking and Listening Standard 4.** 

## Stage 3 - Learning Plan

Design learning activities to align with Stage 1 and Stage 2 expectations

## Lesson 1: Formal, Functional and Perceptual Regions Down on the Farm

### **Essential Question**

What's "special" about a given region and how could it change?

#### **Instructional Strategies**

## Strategy 1: Gathering Information Graphic Organizer

To recall earlier learning, have students generate a working definition of *region* using this graphic organizer.<sup>3</sup>

The students should conclude that a region is a contiguous space, that it has some shared characteristics, and that it has a boundary or border, whether defined or undefined. Examples students produce may be formal (states, countries, continents) or informal (our neighborhood).

## Strategy 2: Extending and Refining Highlighting Text/Selective Underlining<sup>4</sup>

Use highlighting or selective underlining while students read Formal, Functional and Perceptual Regions. In follow-up discussion, emphasize that all of the types of regions share the Essential or "Must Have" elements of the graphic organizer found in Strategy 1. This strategy focuses on the "Might Have" portion of the graphic organizer.

Model this technique for students and discuss with students what was highlighted or underlined and why, in addition to what was not underlined and why. Teachers might want to photocopy the same text for every student and practice this skill collectively as a class.

Source: <a href="http://www.readingquest.org/strat/underline.html">http://www.readingquest.org/strat/underline.html</a>; Gayle H. Gregory & Lin Kuzmich, Differentiated Literacy Strategies for Student Growth and Achievement in Grades K-6; page 120.

<sup>&</sup>lt;sup>3</sup> Click here for sample responses.

<sup>&</sup>lt;sup>4</sup> Understanding the difference between main ideas and supporting details is important to understanding text. Using highlighters can help students gain that skill. Strategies include:

<sup>•</sup> Underline or highlight ONLY the key words, phrases, vocabulary etc.

<sup>•</sup> Use one color for main ideas and a second color for supporting details.

<sup>•</sup> Use boxes vs. circles or some other graphic to differentiate between main ideas and details.

<sup>•</sup> Underline or highlight cause and effect in the two different colors.

<sup>&</sup>lt;sup>5</sup> <u>This reading</u> has a <u>lexile measure</u> of 990, appropriate for the Common Core State Standards 6-8 grade cluster.

#### **Check for Understanding**

Give one example of a functional region within your school. Explain why it is a good example.

#### Rubric

- 2 This response gives a valid example with an accurate and relevant explanation.
- 1 This response gives a valid example with an inaccurate, irrelevant, or no explanation.

A second <u>Check for Understanding</u> is provided in the reading to determine if students can differentiate between types of regions.

## Strategy 3: Extending and Refining Visual Representation

Provide each student with the <u>Square Deal Farm</u> handout. Given only basic information, the students decide where to place the farmhouse, outbuildings, and certain farm activities. These land use decisions are individual and may be based on:

 personal preferences (e.g. I don't want to garden, animals will be smelly so keep them away from the house!);

- the needs of the farmer;
- potential profit.

Have students cut out the icons from page 2 of <u>Square Deal Farm</u> and arrange them in the way they think is best for farming and for the farmer.

When each student is finished, ask where the functional regions of the farm would be. While each farm plan is different, students will probably divide the farm into a personal living space for the farm family, an intensive work center with outbuildings, and a less extensive area of farm fields and pastures.

Have students draw borders around each of the regions on their farm and label each functional region.

Remind or explain to students that the property lines of the farm are the boundaries of the formal region. Intensive land use is

#### **Teacher Background**

The functional region is a useful way for people to understand their surroundings, but it is not permanent or binding.

Changes in economic opportunities may lead people to change their economic activities. A boundary or border around a functional region may be "fuzzy" and may move as individuals change their minds about how to use their land.

In this exercise, students learn that farmers make choices on how to use space. They regionalize their space for efficiency, creating functional regions within their property lines (a formal region). Generally speaking, farmers tend to locate valuable operations and assets close to the farmhouse (for safety and convenience), while activities that are less valuable (pasture, field crops) are placed away from the farm center. When the choices of neighboring farmers are put together, a regional pattern of similar uses of space can be observed. Projection of satellite images or aerial photographs will enhance this lesson.

likely to be situated near the house, extensive use farther from the farm center. The farmer and his family will know their farm well, but they will have more information about the area closer to the house. The farm center is the core of this functional region. The far fields are on the "periphery." The farmer's operation may not

extend all the way to his property lines. Or it could extend beyond them. Many farmers on Delmarva rent lands from neighbors and extend their operations beyond their formal farm.

### **Check for Understanding**

This picture shows a farm with a property line that extends to the river in the background.



Where is the boundary of the functional region of the farm? Explain your answer.

#### Rubric

- 2 This response gives a valid boundary with an accurate and relevant explanation.
- $\ensuremath{\mathsf{1}}$  This response gives a valid boundary with an inaccurate, irrelevant, or no explanation.

## Strategy 4: Extending and Refining Think-Pair-Share

Using tape or another suitable medium, have the students join together the individual farm plans they produced for Square Deal Farm to form a landscape. While each student's plan is a little different, each square will become part of a larger landscape - a composite of individual land decisions.

Students are now asked to define regions at a regional scale. Within this larger context, help the group identify the common characteristics they see.

Conduct a Think-Pair-Share<sup>6</sup> activity and ask students to identify patterns that emerge and speculate on reasons why property owners have made similar choices. Note that this is just a model. In real life, how farmers arrange their space may be the result of a number of factors:

- · cultural preferences
- zoning regulations
- soils or topography
- access to water for irrigation
- the kinds of technology used in farming

Ask the students to suggest boundary lines for their patchwork region, which may be approximate or a buffer zone.

#### Strategy 5: Application

Show the students <u>photos of farms in the United States and China</u>. Have students compare the size and shape of fields, placement of farm buildings, crops chosen, technology available, etc.

Ask students to explain where the boundaries of functional regions are in each photograph. Students should label the core of the functional farms shown and the probable boundaries.

### **Check for Understanding**

• Have each student give an example of the three types of regions.

<sup>&</sup>lt;sup>6</sup> Each individual student takes approximately one minute to think about an answer or solution and record their thoughts. The student then pairs up with another student and they discuss their answers or solutions together. Each pair responds for consideration by the entire class. http://www.wcer.wisc.edu/archive/cl1/CL/doingcl/thinkps.htm

#### **Lesson 2: Specialization and Economic Regions**

#### **Essential Questions**

• To what degree are economic regions specialized?

#### **Background**

Sometimes economic regions are based on natural resources available in the area. Mining for precious metals, gemstones, oil and natural gas, or other commodities is an example. It is important for students to recognize that not all deposits lead to economic activity. For a deposit to become the base for an economic activity, there must be a way to access it, people to do the work, and transportation to get the material to a market or user. There also must be a way to use the commodity. Oil was present for thousands of years, but until engines were invented, it was not a resource. Another drawback of mining is that the deposit may be exhausted in time. The region may shrink or even disappear.

Economic regions that rely on just one resource can experience big problems. In the second part of this lesson, students will learn about the South American country of Chile. The economy was once based only on mining copper, so the economic well-being of the country was dependent on the world price for copper. Today Chile has diversified its economy to include specialized agriculture, making the economy more stable.

#### **Instructional Strategies**

# Strategy 1: Gathering Information Mapping local economic regions to identify regional patterns

#### Materials/resources

- Aerial Photos of a local community, one for each group;
- colored post-its for labels OR colored overhead pens with sheets of transparency plastic.

Use a Think-Pair-Share strategy to have students brainstorm a list of ways that people use land. After the class has generated a list of at least ten ways that land is used, ask the students which uses of land show that the land is very valuable. Ask which uses of land seem to occur on land that is not desirable or valuable.<sup>7</sup>

<sup>&</sup>lt;sup>7</sup> Some of the ideas students come up with may be incorrect, but do not correct misconceptions at this point. For example, someone might suggest that ball fields are very valuable, when in reality, park or recreational land is often situated on a river flood plain or other land not suitable for building. Plan to revisit the list in Strategy 2.

Have students work in pairs to categorize the uses of land, such as shown below.

Type of Land Use	Not Valuable	Moderately Valuable	Very Valuable

Distribute aerial photos of the local area, one for each group. Allow students a few moments to study the photo and try to recognize roads or other features.

Explain that today's focus will be on regions of differing land use. Ask students to begin by trying to find an area of the photo where people appear to be using the land to grow crops or large plantations of trees. Ask how these areas appear differently than "wild" or uncultivated land.

Teacher note: Cultivated plots typically appear in photographs to be ribbed because of machine planting methods.

A good resolution for this strategy is 1:24,000. Aerial views are available from the belaware Geographic Alliance or from many other Internet

Display five terms that describe economic activity: agricultural, residential, commercial, recreational, and industrial.

Discuss with students the meaning of these terms using the word *specialize*.<sup>8</sup> Economic activities are usually defined in terms of functional regions where the edges are zones rather than single lines. Students should recognize that economic regions are increasingly based on specialization, such as the Ruhr River valley, defined by its coalfields, or the Central Valley of California, known for its Mediterranean agricultural products.

#### For example:

 Property owners in this region appear to specialize in retail sales. Point out the appearance of sites devoted to these activities.

• This area has lots of ribbed areas that look like fields. It appears that owners here specialize in agriculture.

Ask students to try to locate each of the listed economic activities – agricultural, residential, commercial, recreational, industrial – on their photo of the local area.

<sup>&</sup>lt;sup>8</sup> Students by 6<sup>th</sup> grade should be familiar with economic specialization. The concept is addressed in two earlier units in the Delaware Recommended Curriculum: Resources and Production (3<sup>rd</sup> grade) and Thinking Economically (5<sup>th</sup> grade).

Provide each group of students with an aerial photo and map-making materials. Ask them to work together to locate areas for types of land use. Using transparency pens or other temporary method, they should try to draw boundaries for the zones or regions they identify. There may be more than one area on the map that exhibits a type of land use, and it is also possible that no area is now devoted to one of the five land uses, even if it was sometime in the past. Remind each student group that they should include a map key.

Ask students to point out where land use is easiest to identify. This is probably the core area for that zone of land use.

Are there places where two uses seem to exist side by side? Explain that the area where a characteristic is not as concentrated is called the periphery.

Ask students what factors might make the boundaries of a region shift or change (a new transportation technology or depletion of a natural resource, for example).

Explain that regions based on economic activity are informal, functional regions. These regions change and shift frequently.

### **Check for Understanding**

• Student groups should produce a map of the region shown in their aerial photo that indicates the regions or zones of economic activity/ land use. They should be able to identify core and peripheral areas of each type of use.

## Strategy 2: Gathering Information Timed-Pair Paraphrasing9

Have pairs of students work together to read the short article "What's Your Specialty?"<sup>10</sup>

The teacher should decide which partner will go first. Instruct this student to explain to his or her partner **benefits that can come when an economic region specializes**. Give 2 minutes for this explanation.

Set a timer. Now ask the other student to paraphrase what the other just said. The paraphrase might start, 'I heard you say...'

Ask students to share with the whole class what their partners said.

Now reverse the process, and have the second student explain to his or her partner **which facilities make trade connections easier**. Give 2 minutes for this explanation.

<sup>&</sup>lt;sup>9</sup> Betty Hollas. *Differentiated Instruction in a Whole-Group Setting.* c.2005. Crystal Springs Books, pg. 10 <sup>10</sup> This reading has a <u>lexile measure</u> of 1000, appropriate for the Common Core State Standards 6-8 grade cluster.

Have the partner paraphrase the explanation. The paraphrase might start, 'I heard you say...'

Ask students to share with the whole class what their partners said.

#### **Check for Understanding**

Why do economic regions specialize and trade? Explain your answer.

Choose one of these options:

- Construct a flow chart diagram and label the steps of the process.
- Write a short response to the question.

## Rubric for written response

- 2 This response gives a valid reason with an accurate and relevant explanation.
- 1 This response gives a valid reason with an inaccurate, irrelevant, or no explanation.

## **Strategy 3: Gathering Information**

Have students read and complete the questions in  $\underline{\text{Specializing in Natural Resources}}$  and Farming.  $^{11}$ 

### **Check for Understanding**

After reading and completing the questions, have students write a short explanatory text.<sup>12</sup>

What is economic specialization? After reading Formal, Functional and Perceptual Regions, What's Your Specialty?, and Specializing in Natural Resources and Farming, write a report that defines economic regions and explains specialization. Support your writing with evidence from the texts.

Click here for a one-page copy of the student writing rubric.

 $^{11}$  This reading has a <u>lexile measure</u> of 1130, appropriate for the Common Core State Standards 6-8 grade cluster.

 $<sup>^{12}</sup>$  This task replicates Task 12 of the <u>Literacy Design Collaborative</u>. LDC *template tasks* are fill-in-the-blank "shells" that allow teachers to insert the texts to be read, the writing to be produced, and the content to be addressed. Template tasks create high-quality student assignments that develop reading, writing, and thinking skills in the context of learning geography. Template tasks are built from the Common Core State Standards.

## Strategy 4: Extending and Refining Map Analysis

Revisit the list of land use categories from Strategy 1. Ask students if there are any revisions they would suggest to the list of uses or the value of the land based on what they learned so far.

Display the <u>map of West Virginia Coal Producing Counties</u>. Review with students the use of color in the GIS map key, establishing that red is the color showing highest coal production.

Ask students to identify the coal producing region of West Virginia and draw the outer boundary of the region.

Next ask the students to identify the core of the region and label it. What coal producing areas would be the periphery of the region?

Model for the students the labeling of periphery. Point out that there are some coalproducing areas that are outside the main region. The regional boundary does not have to include all of the coal producing areas. The core does not have to be positioned near the center of the region.

#### **Click here for the Check for Understanding**

Teacher Tip: Remind students that the oil-producing regions are connected by pipelines to port facilities and refineries. Without these connections, the economic activity would not be worthwhile.

## Rubric for written response on page 2

- 2 This response gives a valid cause with an accurate and relevant explanation.
- $\ensuremath{\mathsf{1}}$  This response gives a valid cause with an inaccurate, irrelevant, or no explanation.

## Strategy 5: Application Case Study and Reciprocal Teaching<sup>13</sup>

Review and locate on the world map the economic regions visited in this unit (farm region in USA and China; coal region of West Virginia; oil producing regions of Libya). Remind students that economic regions can be identified at any scale, local to global.

<sup>&</sup>lt;sup>13</sup> Robert J. Marzano, *Classroom Instruction That Works*. ASCD. 2001 http://www.readingquest.org/strat/rt.html

Provide background knowledge by showing this <u>video from Governor Markell</u> explaining the Delaware connection to Chilean fruit production.<sup>14</sup>

Have students read the <u>Case Study</u>. <sup>15</sup> Use a modified reciprocal teaching strategy to promote comprehension by tackling the ideas in a text on several fronts.

Put students in groups of three. Give each student a role: summarizer, questioner, or clarifier. Have students read the <u>Case Study</u>. Encourage them to use note-taking strategies such as selective underlining or sticky-notes to help them better prepare for their role in the discussion.

At the given stopping point, the summarizer will highlight the key ideas up to this point in the reading. The questioner will then pose questions about the selection:

- unclear parts
- puzzling information
- o connections to other concepts already learned

The Clarifier will address confusing parts and attempt to answer the questions that were just posed.

Have pairs of students respond to the following questions:

- What other parts of the world might be good markets for Chile's fresh fruit?
- Look at the map of Chile on page 1 of the <u>Case Study</u>.

Where would you say the mining regions of the country are located?

Where are the fruit-growing regions?

• What might happen to change the boundaries of the mining regions? What might happen to affect the boundaries of the fruit-growing regions?

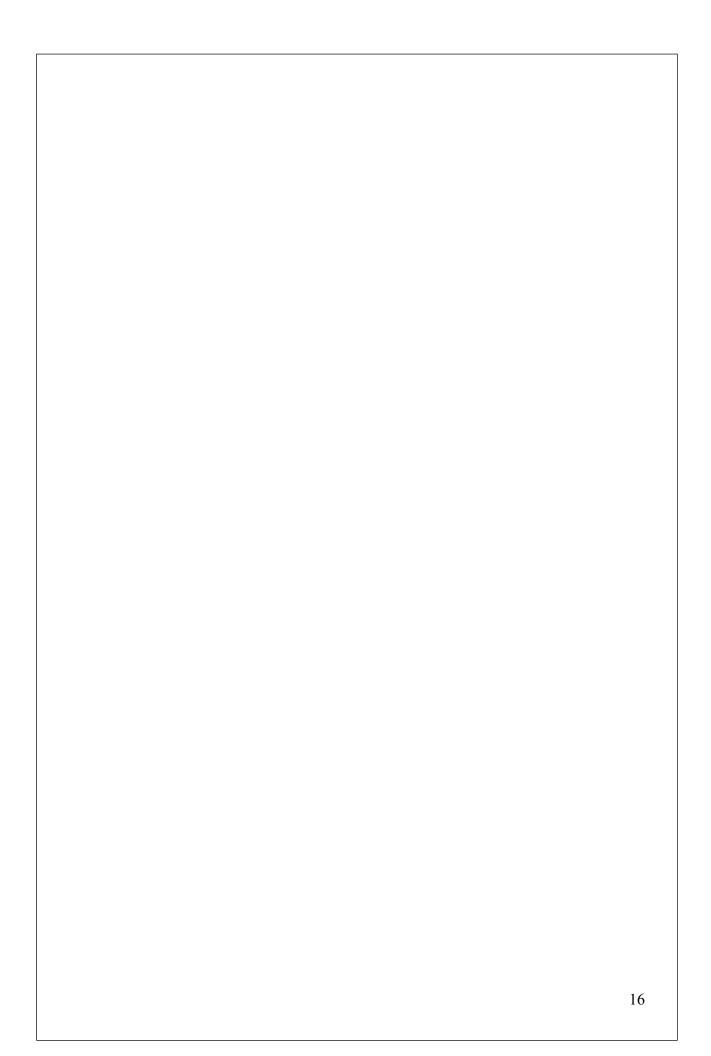
### **Check for Understanding**

<u>Click here for a Check for Understanding</u> that provides information about exports from South American countries. Have students work in pairs to complete the questions on page 2. The map on page 3 can be used by the pair of students or as a whole class activity.

<u>Click here for a teacher's version of this Check for Understanding</u> to help students check their responses.

 $<sup>^{14}</sup>$  This video is also available at  $\underline{\text{http://www.contentdelaware.org/?page\_id=42\&FID=131}}$ .

 $<sup>^{15}</sup>$  This reading has a <u>lexile measure</u> of 960, appropriate for the Common Core State Standards 6-8 grade cluster.



Must have these elements:

Might have these characteristics:

**REGION** 

3 Good examples:

2 non examples: Why are these not regions?

Reasons for Regions Lesson 1 Strategy 1 Sample Responses

#### Must have these elements

continguous area or space some shared characteristics borders or boundaries

## Might have these added characteristics

size can vary borders can be permanent or changeable can be based on physical, cultural, or other factors overlap- a place can be in more than one region

## region

## 3 good examples:

US states, countries
Kent, Sussex, New Castle counties
school district
downtown, shopping district
polar, tropical, desert, other climate regions
mountain, oastal plain, watershed, river valley

## 2 non-examples - Why are these not regions?

I-95 (a connector between regions)

northern hemishere (has space and borders, but no real shared characteristics)

Volcanoes of the world (do not share a contiguous space - spread out)

6th graders (no location or area)

Reasons for Regions Lesson 1 Strategy 2 Types of Regions

Regions are helpful ways for people to understand the world. There are so many places in the world, and each one is a little different. It helps if we can group places that are close together and similar in some ways into regions. Geographers group the regions of the world into three types.

**Formal Regions**: The boundaries of formal regions are fixed and agreed upon. When people buy land, establish a national park, or start a new country they are establishing a formal region. Formal regions have legal and political standing, which means that the same laws, regulations, and protections apply everywhere within the boundaries. People who own land have the boundaries surveyed and the deed registered with the government to show that they own all the land inside the boundaries. Government borders are established by treaties between nations or states.

It is possible to change the boundaries of formal regions, but some sort of official action is needed. For example, the United States has expanded its borders many times after it was established in 1776. Sometimes new land was purchased from other countries that controlled the territory, or the land was taken in a war or negotiated with another country. Sometimes people living in territories asked to join the United States. Each time the boundary was changed, however, the new area became an equal part of the formal region called the United States of America.

**Functional Regions:** Functional regions are defined by how the area is used or operates in the environment. These regions are defined by some characteristic or set of characteristics. But the characteristics may be spotted more often toward the center or core of the region, and less frequently toward the edges. As you move toward the edges or periphery of the region, the intensity of what defines it tends to decline. A functional region, therefore, has less intensity away from the center and the boundary between it and an adjoining region may be a zone rather than a precise boundary line.

The boundaries of functional regions are sometimes hard to define. Often there isn't a clear line between functional regions. Instead there is a fuzzy border zone where the region "fades out." Think of the edge of a town in a rural area: often there will be some farm characteristics (fields, farm machinery) and some town characteristics (signs, businesses along the road). The borders of functional regions can change easily as people change their minds about how to use their space. Physical regions based on climate, landforms, or other natural factors are functional regions. Their characteristics can vary across the space of the region and the boundaries of the region are often blurred. The boundaries of physical regions can change, but changes are usually slow.

**Perceptual Regions:** Perceptual regions exist only in our minds, such as "the South" or "the Far West" with no agreed-upon boundaries, but they are important because we make decisions based on what we know about perceptual regions. People think of parts of the country in different ways. When they speak of "The

Reasons for Regions Lesson 1 Strategy 2 Types of Regions

West" they may be thinking of cowboys, Native Americans, oil wells, and dry lands. Or they could be thinking of California orange groves, Hollywood actors, and surfers on sandy beaches. There is no agreed on definition of the West, and no official borders. Which states are in the West? It depends on what characteristics you think of as western. Would you move to the West? Where does the West begin? These are questions that come up when we talk about perceptual regions.

## **Check for Understanding**

- Underline the regions below that are formal.
- Circle the functional regions.
- Write P after each region that is perceptual.

Arizona	Yosemite National Park	Rocky Mountains
The Badlands	Ranch Lands	Idaho
Death Valley	Ute Indian Reservation	Apple Country
Tornado Alley	Border Lands	Spanish Language

Reasons for Lesson 1 St Equare Dea	rategy 3	ro Doal Farm	a small farm	in Quadrilator:	al County
our first jo	b will be to get or below shows the p	ganized so yo	ur work will b	e efficient and	profitable.
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County R	oad				

Reasons for Regions Lesson 1 Strategy 3 Square Deal Farm

Farmhouse



Garage for family car and truck



Livestock Barn

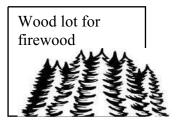


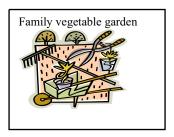
**Equipment Storage Building** 

STORAGE for Equipment

Pasture for grazing cows or livestock





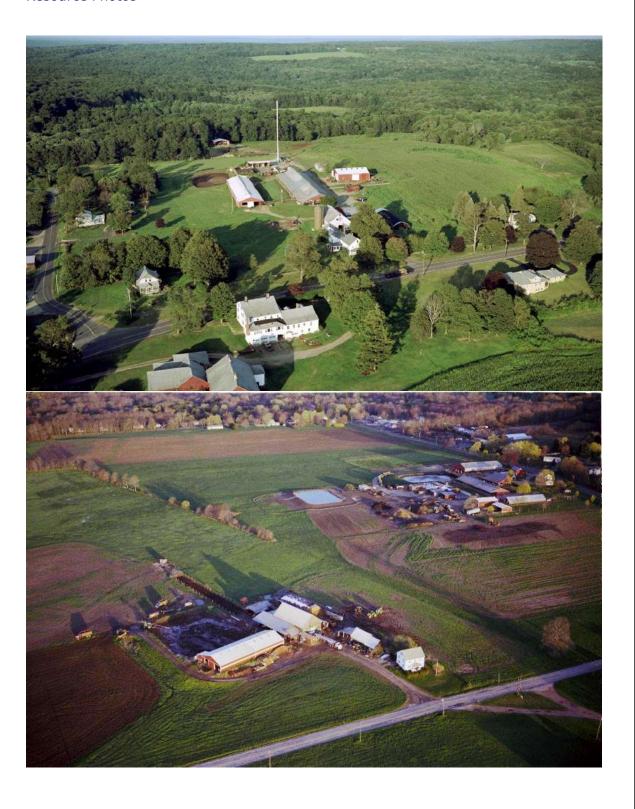




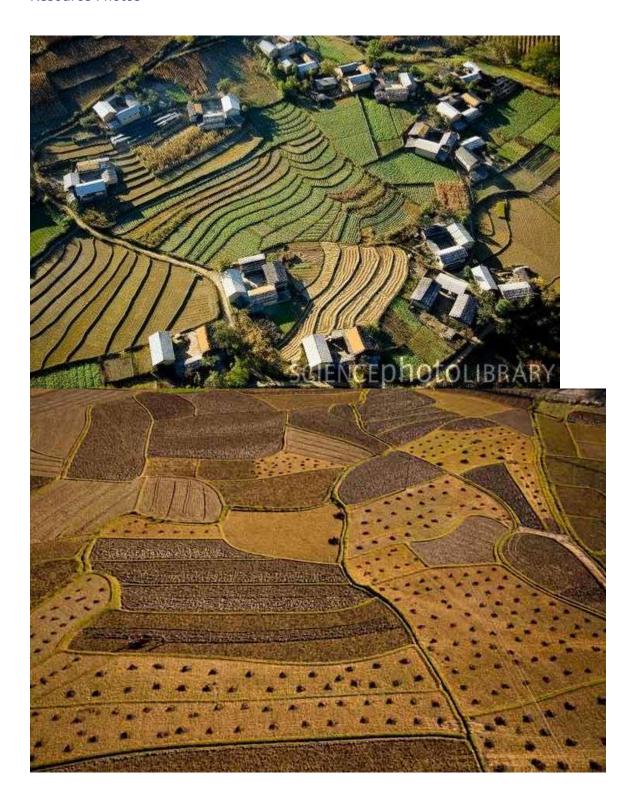
Reasons for Regions Lesson 1 Strategy 4 Resource Photos



Reasons for Regions Lesson 1 Strategy 4 Resource Photos



Reasons for Regions Lesson 1 Strategy 4 Resource Photos



Reasons for Regions Lesson 1 Strategy 4 Resource Photos





Reasons for Regions Lesson 2 Strategy 2 What's Your Specialty?

#### What's Your Specialty?

Factors that can lead to the development of ECONOMIC REGIONS

Economic activity - how people make a living - is an important factor in the development of a place. Every day people make decisions about where they will live and work and what kind of work they will do. Their decisions are partly influenced by geography. Site characteristics and situation are both important factors. Climate, soils, available raw materials and resources, skills of workers, road connections, communications and technology all figure into the site. Distance to markets and threats of competition from nearby places are part of situation. It often happens that places close to



each other make similar decisions about what economic activities will be most profitable for them based on the resources they have to work with. When places near one another get into the same business in a major way, we say they decide to "specialize."

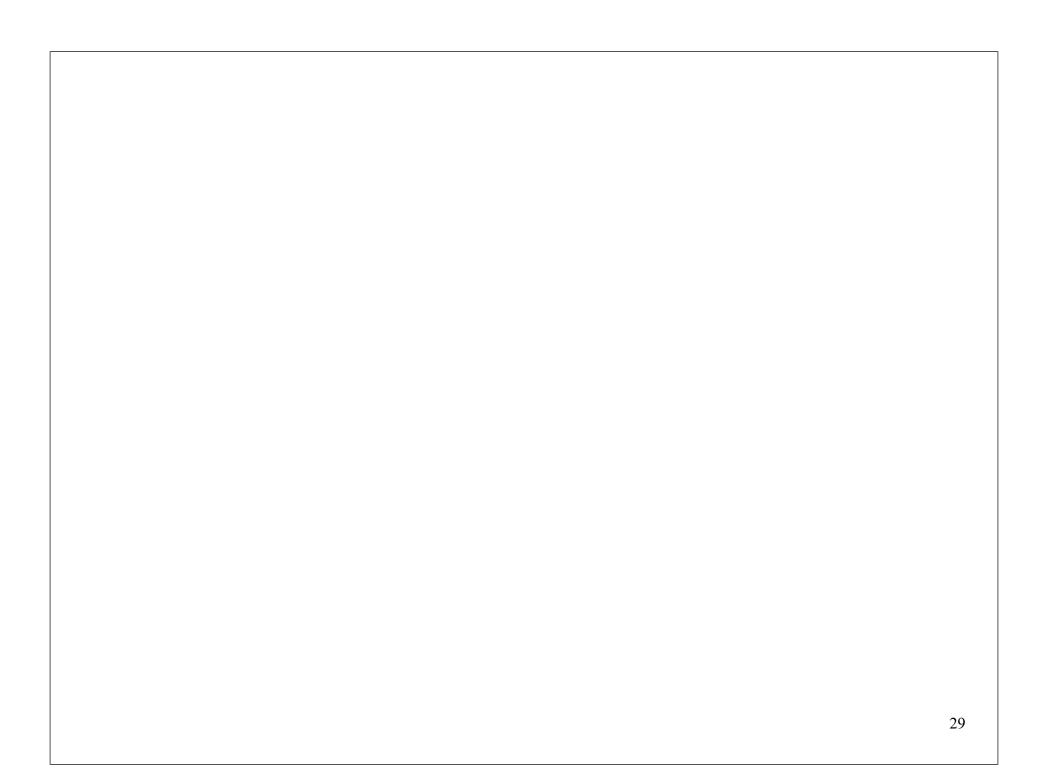
While there are still other economic activities going on in that region, one activity begins to dominate. More workers become involved, and their skills increase. Facilities for that economic activity become bigger and better. Customers for products are attracted to an area where they have several good choices. Best of all, people in a specialized region usually benefit. Incomes rise as economic activity in the region increases. The money made from specializing can be used to pay for other goods no longer produced in the region. Specialization leads to and depends



on trade. For example, in a city where cars are becoming the specialty, factories making ladies purses and shoes may close. Workers make enough money to buy those items from another place that specializes in leather goods. Without trade, each place would be forced to produce everything people want or need. Trade depends on good connections.

## Classroom Assessment Rubric (Informational or Explanatory)

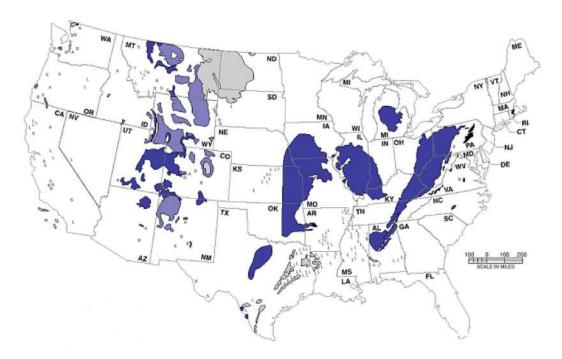
	LDC Informational/Explanatory Classroom Assessment MEETS EXPECTATIONS
Focus	Addresses prompt with a focused response.
Reading/Research	Presents and applies relevant information with general accuracy.
Controlling Idea	Establishes a controlling idea that states the main purpose and/or question for the tasks. L2 Addresses the credibility of sources.
Development	Presents sufficient information in order to examine or convey topics or issues, answer questions, solve problems; identifies salient themes or features; explains key information with sufficient detail. *L2 Discusses relevant implications to topic. L3 Identifies a gap or unanswered question.
Organization	Applies a generally effective structure to address specific requirements of the prompt.
Conventions	Demonstrates a command of standard English conventions and cohesion; employs language and tone appropriate to audience and purpose.
	NOTYET
Focus	Attempts to address prompt but lacks focus or is off-task.
Reading/Research	Attempts to present information relevant to prompt.
Controlling Idea	Controlling idea is weak and does not establish a purpose and/or address a research question.
Development	Tends to retell rather than present information in order to answer questions, solve problems; lacks details to develop topic. *L2 Implications are weak or not relevant to topic. L3 Does not identifies a relevant gap or unanswered question.
Organization	Applies an ineffective structure; composition does not address requirements of the prompt.
Conventions	Demonstrates a weak command of standard English conventions; lacks cohesion; language and tone are inappropriate to audience and purpose.



### **Specializing in Developing Resources**

Natural resources are not evenly distributed across the world. Water, essential for drinking, for agriculture, and for industry, is abundant in some places and scarce in others. Farmers require good soils, water resources and favorable climate to produce crops. The number of places with just the right combination of conditions is limited. Iron ore, coal, copper, and other minerals are essential to manufacturing of machinery, electrical equipment and tools. Deposits of these and other commodities are found underground in areas that can be difficult to access. Some countries find themselves blessed with large amounts of many resources. Other countries have few natural resources to work with. The distribution of resources has a significant effect on specialization within countries.

This map shows the distribution of coal, a fossil fuel used to generate electricity. (Shaded areas are coal.)



Which states might specialize in the production of this valuable resource?

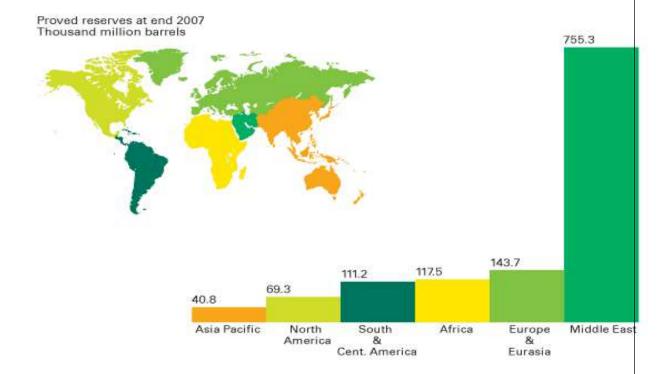
Circle the boundaries of the Coal Regions.

Reasons for Regions Lesson 2 Strategy 3 Specializing in Developing Resources and Farming

## **Thinking Like a Geographer**

British Petroleum is a company that explores the world for oil. They provided this map to show where they believe oil exists below the ground.

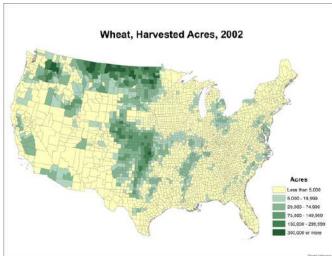
- What does the map tell about available oil reserves (oil under the ground)? What information does the graph provide?
- What are some things about oil resources the map does NOT tell you?
- Circle the regions of the world that might specialize in pumping and selling oil.



## Reasons for Regions Lesson 2 Strategy 3 Specializing in Developing Resources and Farming

## **Specializing in Farming**

Farmers need soil, water, and a reasonable climate to grow food. But farming methods have been developed to bring water to dry areas, build up fertility in soils, and even protect crops from extremes of weather and



extend the growing season. Each climate area has a range of crops that can be produced there. Many crops will grow in a wide variety of places with only few adjustments. Farmers often specialize in crops that will thrive in local conditions. For example, apples will grow in most of the states, but they grow particularly well in Washington State and a large apple growing region has developed there. Other examples of successful specialization in agriculture are the cherry growing areas of Washington State and Michigan, the growing of wine grapes in the Napa Valley of

California, and the orange groves of Florida and southern California. Farmers who specialize in those crops in the areas mentioned tend to be successful most of the time. They depend on trade with other regions to make their work profitable.

#### **Seasonal Differences Can Pay Off!**

Farmers have learned to make the most of seasonal differences. In the northern

hemisphere, the growing season for most areas begins in March or April and ends in October. A few areas in southern states are usually frost free, and there farms grow fresh vegetables to ship to markets in the northern states. Many of the fresh fruits and vegetables sold in U.S. supermarkets during the winter come from South and Central America. Remember that the seasons in South America are opposite from North America. The summer growing season in Chile and Argentina begins in November and ends in April. Shipping fruits and vegetables from the southern hemisphere Main Cotton Growing Areas in the United States is possible because of modern transportation



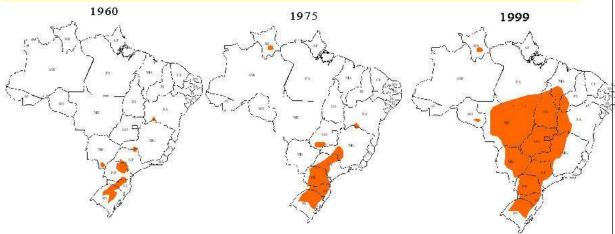
methods, but it adds to the cost. The Port of Wilmington, DE, specializes in providing facilities to handle imported fruits and vegetables.

Reasons for Regions

## Lesson 2 Strategy 3 Specializing in Developing Resources and Farming

## **Check for Understanding**

These maps show the change in the number of acres of soybeans grown in Brazil from 1960 – 1999.



Why would the number of acres of soybeans grown in Brazil have changed? Explain your answer with geographic reasoning.

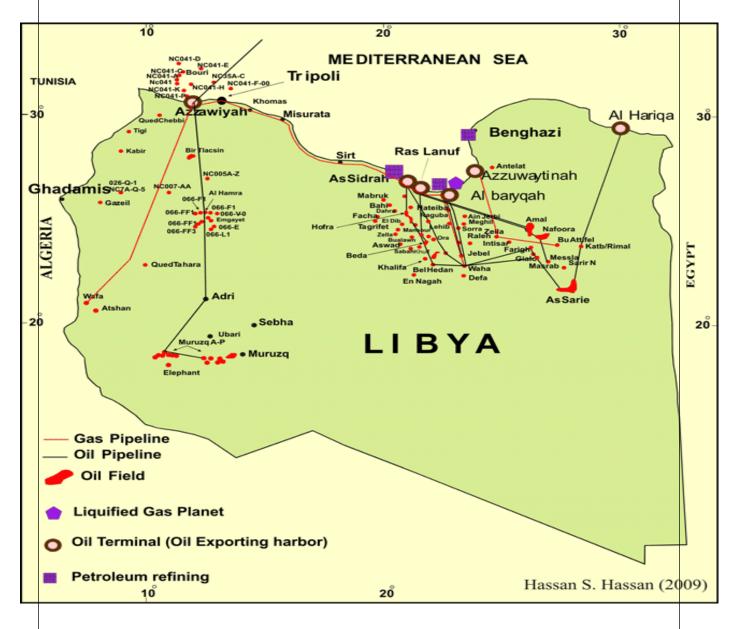
#### Rubric

- 2 This response gives a valid reason with an accurate and relevant geographic explanation.
- 1 This response gives a valid reason with an inaccurate, irrelevant, or no geographic explanation.

Reasons for Regions Lesson 2 Strategy 4 Check for Understanding

Libya is a country in Northern Africa. Most of the income for this country comes from pumping, refining and selling oil.

This map from 2009 shows where the oil is pumped from the ground, where it is refined, and where it is loaded on tankers to be sold to other countries. Pipelines across the desert connect the oilfields to the coast.



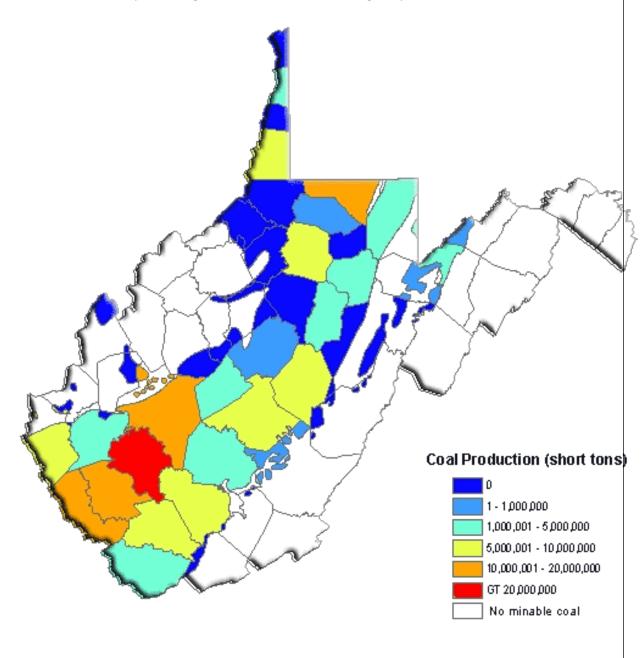
Use this map to find oil producing regions of Libya. Draw a boundary line around each region you identify. How is the region connected to the coast?

Reasons for Regions Lesson 2 Strategy 4	
Check for Understanding  For each region, put an X where you think the core of the region would be.	
Remember that the core may not be near the center of the region.  Label the periphery of each oil region. Remember that some oilfields may be out the boundaries of the region.	tsid
What might change the boundaries of the oil-producing regions of Libya? Explain your answer.	า
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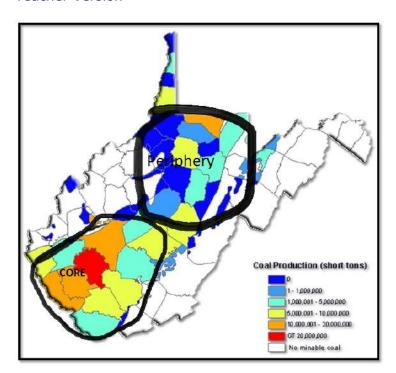
## Reasons for Regions Lesson 2 Strategy 4 Map Analysis

This map shows the coal production in counties of West Virginia. Use this map to practice drawing boundaries for economic regions.

- Study the key and notice the counties that produce the most coal. Draw a boundary line around the coal producing region.
- Label the core of the region.
- What areas are on the periphery?
- What coal producing areas are outside the region you defined?



Reasons for Regions Lesson 2 Strategy 4 Map Analysis Teacher Version



#### Reasons for Regions Lesson 3 Strategy 4

# Chile: A Case Study Specialization and Diversification

Chile is a long, narrow country on the western coast of South America. The Andes Mountains rise like a wall on the eastern border, and the Pacific Ocean forms the western coastline. For centuries the economy of Chile has depended on development of natural resources. Chileans have specialized in mining and exporting natural resources for many years. Chile produces and exports more than half of the world's copper. Other exports included iron ore and lumber.

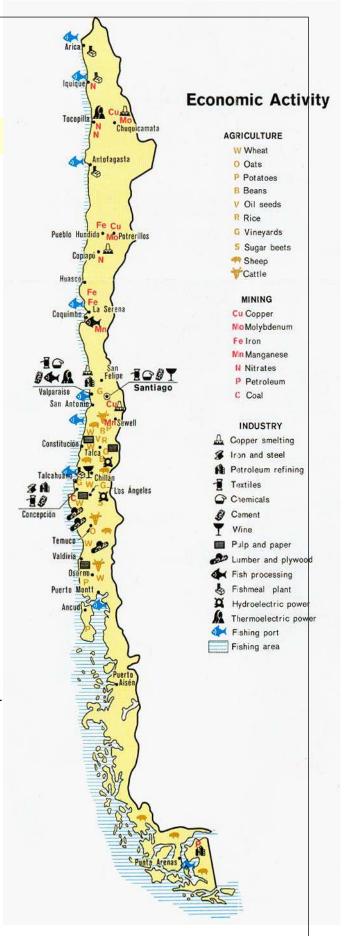


#### Specialized problem solving

Specializing in copper production was hard work, but it provided many jobs. When the price of copper was high, Chileans made money. Taxes on the profits paid for improvements like schools, roads and airports. But when the world price of copper fell, Chile's economy suffered. Wages fell, people lost their jobs, and government couldn't help because tax collections fell. The people of Chile needed a new approach.

#### **Diversification**

The government of Chile led the effort to add another specialization for Chile. They wanted an economic activity that would provide more jobs and bring in a steady income even if world copper prices fell.



Reasons for Regions Lesson 3 Strategy 4

This would *diversify* the economy because income would come from more than one source. The answer was specialized farming.

The Central Valley of Chile has a sunny Mediterranean climate, similar to the climate of Southern California. Grapes, citrus fruits, and many other fruits and vegetables thrive in this mild climate. Best of all, Chile is in the southern hemisphere. When it is summer in Chile and fruits are plentiful, the United States and other countries in the northern hemisphere are having winter. So Chile decided to market fresh fruits and vegetables to North American supermarkets. A second, related specialty



would be winemaking. Over the past twenty years, exports of fresh produce and Chilean wine have both increased steadily.

Exports of fresh produce depend on fast efficient shipment to markets and good storage facilities. No one wants to buy spoiled grapes or rotten asparagus! Many of the special ships leave the modern port of Valparaiso, Chile, and arrive at the Port of Wilmington, DE. From Wilmington, waiting trucks distribute fruit to supermarkets all over the eastern United States.



# South American Specialization - Organizing and Analyzing Geographic Data

Country	Exported products	Export partners	
Argentina	soybeans and derivatives, petroleum and gas, vehicles, corn, wheat	Brazil 21.2%, China 9.1%, Chile 7%, US 5.4% (2010)	
Brazil • •	transport equipment, iron ore, soybeans, footwear, coffee, autos	China 15.2%, US 9.6%, Argentina 9.2%, Netherlands 5.1%, Germany 4% (2010)	
Bolivia	natural gas, soybeans and soy products, crude petroleum, zinc ore, tin	Brazil 43.5%, US 12.3%, Peru 6.8%, Colombia 5.5%, Japan 5.1%, Argentina 4.8% (2010)	
Chile	copper, fruit, fish products, paper and pulp, chemicals, wine	China 23.8%, Japan 10.2%, US 10%, Brazil 6%, South Korea 5.9% (2010)	
Colombia	petroleum, coal, emeralds, coffee, nickel, cut flowers, bananas, apparel	US 38%, EU 15%, China 3.5%, Ecuador 3.4% (2011 est.)	
Ecuador	petroleum, bananas, cut flowers, shrimp, cacao, coffee, wood, fish	US 45%, Peru 7.7%, Venezuela 6.5%, Colombia 4.6%, Panama 4.6%, Chile 4.2% (2011	
Guyana	sugar, gold, bauxite, alumina, rice, shrimp, molasses, rum, timber	Canada 24.6%, US 24.6%, Ukraine 6%, Netherlands 4.9%, Trinidad and Tobago 4.6%, Portugal 4.5%, Jamaica 4.5%, UK 4.1% (2010)	
Paraguay	soybeans, feed, cotton, meat, edible oils, electricity, wood, leather	Uruguay 16.2%, Brazil 12.8%, Chile 10%, Argentina 8.1%, Italy 5%, Netherlands 4.4%, Spain 4.3%, Turkey 4.2%, Germany 4.2% (2010)	
Peru	copper, gold, lead, zinc, tin, iron ore, molybdenum, silver; crude petroleum and petroleum products, natural gas; coffee, asparagus and other vegetables, fruit, apparel and textiles, fishmeal, fish, chemicals, fabricated metal products and machinery, alloys	China 15.2%, Switzerland 13%, US 12.7%, Canada 9.1%, Japan 4.8%, Germany 4.2% (2011)	
Suriname	alumina, gold, crude oil, lumber, shrimp and fish, rice, bananas	Canada 36.8%, US 12%, Belgium 11.6%, UAE 9.5%, Netherlands 6.1%, Norway 5.5% (2010)	
Uruguay	beef, soybeans, cellulose, rice, wheat, wood, dairy products; wool	Brazil 20%, Nueva Palmira Free Zone 9%, Argentina 7%, China 7%, Russia 4.9% (2011 est.)	
Venezuela	petroleum, bauxite and aluminum, minerals, chemicals, agricultural products, basic manufactures	US 38.7%, China 7.7%, India 4.8%, Cuba 4.1% (2010)	

This chart uses information from the US Central Intelligence Agency; CIA Factbook (https://www.cia.gov/library/publications/the-world-factbook/geos/ns.html)

For each of the columns in the table, write a sentence that tells what type of information is included and how it is organized.

Column 1: *The countries of South America are listed in alphabetical order.* 

Column 2: The exported products or commodities are listed in order of the value of the exports.

Column 3: The countries who buy the exported goods are listed in order of the percentage of total exports they buy.

### The exported products listed could be grouped into categories. Countries specialize in producing:

- agricultural products;
- · petroleum or other minerals;
- manufactured products (like machinery, clothing, or electronics).

Place a green dot under the name of the countries that exports agricultural products.

Place a blue dot under the name of the countries that export petroleum and minerals.

Place a red dot under the countries that export manufactured goods.

#### When countries have diversified, they have specialized in products from several categories.

- How many of the South American countries have exports from all three categories agricultural, petroleum and minerals and manufactured goods? *Six countries: Argentina, Brazil, Chile, Colombia, Peru, and Venezuela.*
- How many have exports in only one category? *One country: Uruguay*

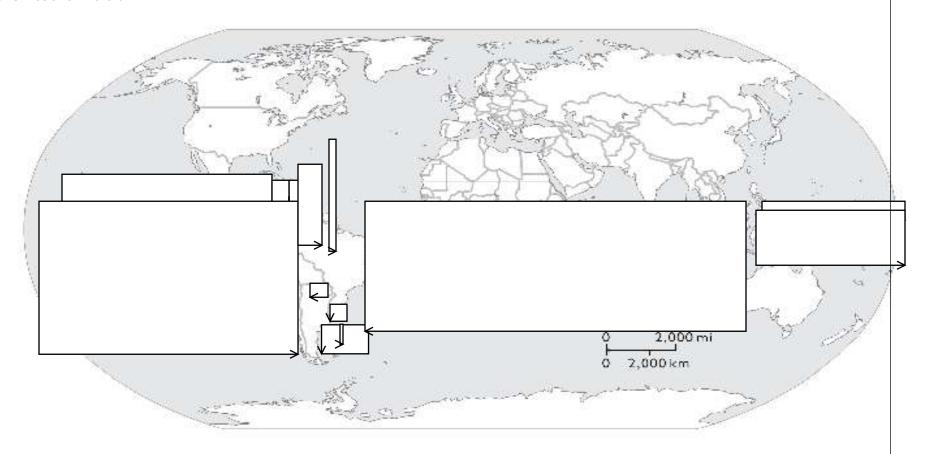
Write a sentence that summarizes what you have learned about economic specialization in South America.

Answers may vary. Students should note that almost all countries export agricultural products. Most countries specialize in at least two categories.

On a map of the world (page 3), draw a line between each South American country and its most important trading partner in terms of percentage of exports. Use an atlas or reference map to help you locate the countries.

After you have mapped the trade connections, look for similarities and differences. Why do you think they occur? *Answers may vary. Students may note that countries with similar climate specialize in similar agricultural exports and may have the same trading partners.* 

Write a sentence that summarizes the pattern or patterns you notice when the trade ties are mapped. The strong trade ties with China, the US, Canada and the European Union may be noted by students. Relatively few export partners are within South America. Teachers may point out that travel across South America is difficult because of terrain, including the Andes Mountains and Amazon Rainforest. Most population centers are near the coast, and trade often follows the coastline.



Teacher Note: While it is possible to substitute a pre-labeled map, use of a blank map requires students to use their mental map or consult references, reinforcing mental map skills for Geography Standard 1.

## Reasons for Regions Lesson 2 Strategy 5 Check for Understanding

# South American Specialization - Organizing and Analyzing Geographic Data

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This chart uses information from the US Central Intelligence Agency; CIA Factbook (https://www.cia.gov/library/publications/the-world-factbook/geos/ns.html)

what type of information is included and how it is organized.  Column 1:	minerals and manufactured goods?  How many have exports in only one category?		
	Write a sentence that summarizes what you have learned about economic specialization in South America.		
Column 2:			
Column 3:	On a map of the world (page 3), draw a line between each South American country and its most important trading partner in terms of percentage of exports. Use an atlas or reference map to help you locate the countries.		
The exported products listed could be grouped into categories. Countries specialize in producing:	After you have mapped the trade connections, look for similarities and differences. Why do you think they occur?		
<ul> <li>agricultural products;</li> <li>petroleum or other minerals;</li> <li>manufactured products (like machinery, clothing, or electronics).</li> </ul>	Write a sentence that summarizes the pattern or patterns you notice when the trade ties are mapped.		

goods.

agricultural products.

petroleum and minerals.

products from several categories.

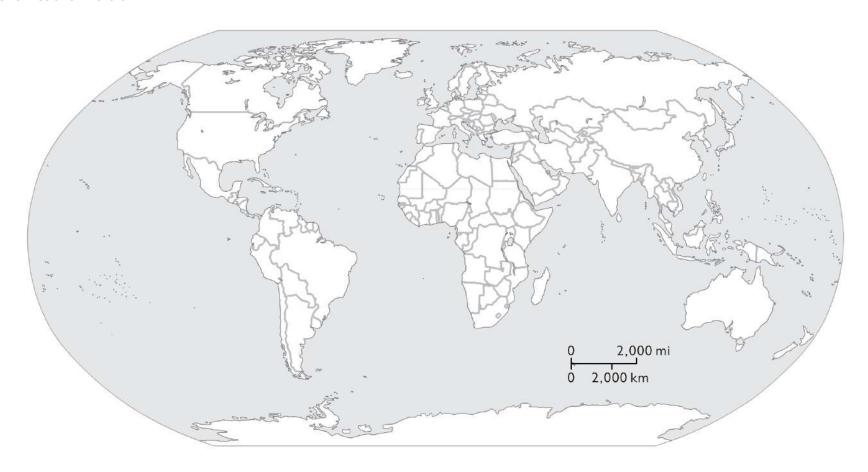
Place a green dot under the name of the countries that exports

Place a blue dot under the name of the countries that export

Place a red dot under the countries that export manufactured

When countries have diversified, they have specialized in

• How many of the South American countries have exports



Map from National Geographic Education			
		47	
Reasons for Regions	Р	age 47	

### Reasons for Regions Transfer Task Reading Comparison Chart

#### World Connections

The Arabian Peninsula is a region in southwest Asia. Most of this land is a harsh desert with extremely hot or cold conditions. Sandstorms threaten communities and economic activities. There are no rivers, and drinking water is in short supply. Expensive desalinization plants remove the salt from sea water to support some cities.

In former times, people here were mostly traders or herders. Oil was discovered in the 1930s and now oil production makes up most exports. Most of the oil is pumped in the desert and carried by pipelines to ports on the Persian Gulf or the Red Sea. Only a few refineries that can convert the oil to gas exist on the peninsula; international trade is vital to the region's economy. Crude oil or petroleum products account for 90% of this region's exports.





**The Delmarva Peninsula** is a region in the United States on the Atlantic Coastal Plain. The land here is flat and fertile, and the climate is temperate. There are many short, tidal rivers, but no deep ports. Water generally comes from underground aquifers.

In former times, the peninsula had a few small farms and homesteads, and most land was covered in forest. A railroad built in the 1850s enabled the transport of lumber and crops to markets in Wilmington, Philadelphia, and then on to the rest of the United States. Trees were cleared and crops were planted by new Today most field crops on the residents. peninsula are corn or soybeans used to feed broiler frver chickens. Almost 90% agricultural income in this region is related to the chicken industry. A quality road system makes trucking agricultural products, including chicken, to markets easy and efficient.

	Arabian Peninsula	Both Peninsulas	Delmarva Peninsula
Compare land and resources			
Compare climates			
Facilities needed to support specialization			
Advantages of Specialization			
Disadvantages of Specialization			
What could happen to change this economic region?			