

# At Your Fingertips

## Objective

On a world map, students will locate countries, using lines of latitude and longitude, from which we import foods that climatic conditions prevent us from growing locally.

## Background

Have you ever had a craving for grapes in the middle of January? What did you do? The most logical solution would be to pick up a bunch at the store. But where does your grocer get grapes in January? Grapes are a minor commodity in Oklahoma, but the grape harvest doesn't start anywhere in the United States until summer.

Grapes available in January from Oklahoma grocery stores are imported. They are grown in another country, sold to a large distribution company, shipped into our country, and sold to food supply warehouses, which, in turn, sell them to your local grocery store. Americans have become accustomed to having all the foods they want available all year round. Imports fulfill this modern demand. Grapes available in winter are usually imported from countries in South America. Chile, a country in South America, is one of the leading exporters of winter grapes to our country. Produce coming from South America is shipped on large cargo ships. When the produce arrives, customs and agricultural inspection agents examine the goods for diseased produce and review the import papers.

The grapes you bought in January fulfilled your craving, but you probably paid a high price for them. Imports cost more for a number of reasons, but the biggest factor is transportation. Weather is another factor. If the weather is favorable to a crop like grapes, there might be an overabundance of the product. This is good news for you, because it means the price might go down. If the weather is bad for grapes, the crop will be smaller, and prices may go up.

Governmental relationships between countries can affect the price of your grapes, too. If the US government gets into an argument with the government of Chile, the two governments may break their trade agreements, and the import/export business will not be allowed to function. That may mean you have to do without grapes until the crops in California and Texas are ready. On January 1, 1994, the North American Free Trade Agreement (NAFTA) between the United States, Canada, and Mexico entered into force. Under this agreement trade has soared, making a wider variety of foods available at all times of the year.

Eating a wide variety of foods keeps us healthy and enriches our lives. Imports help us make sure we have many different foods at our fingertips through all the seasons.

## Oklahoma Academic Standards

### GRADE 1

#### Social Studies PALS—

1.A.1,2,B.4,5; 2.2A.2,B.6, C.7,8;  
3.A.2

Social Studies Content—2.2; 3.2

#### COMMON CORE

Language Arts—1.RI.1,2,4;  
1.W.2,5,6,7,8; 1.SL.1,2,3; 1.L.5,6

### GRADE 2

#### Social Studies PALS—

1.A.1,2,B.4,5,C.7; 2.A.2,B.6,C.7,8;  
3.A.2,3,B.4

Social Studies Content—2.1; 3.1,4

#### COMMON CORE

Language Arts—2.RI.1,2,4;  
2.W.2,5,6,7,8; 2.SL.1,2,3; 2.L.5,6

### GRADE 3

#### Social Studies PALS—

1.A.1,2,B.4,5,C.7;  
2.A.2,B.6,C.7,8,D.10; 3.A.2,3,B.4  
Social Studies Content—2.1,2,3;  
3.1a,b,d

Language Arts—3.RI.1,2,4,7,8,10;  
3.RF.3,4; 3.W.2,4,5,6,7,8;  
3.SL.1,2,3,4; 3.L.4,5,6

### GRADE 4

#### Social Studies PALS—

1.A.1,2,B.4,5,C.7;  
2.A.1,B.4,6,7,8,9,C.10; 3.A.2,3,B.4  
Social Studies Content—1.1a,2a,3,4  
COMMON CORE

Language Arts—4.RI.1,2,4,5,7,10;  
4.RF.3,4; 4.W.2,4,5,6,7,8,9,10;  
4.SL.1,2,3,4; 4.L.4,5,6

### GRADE 5

#### COMMON CORE

Language Arts—5.RI.1,2,4,5,7,10;  
5.RF.3,4; 5.W.2,4,5,6,7,8,9,10;  
5.SL.1,2,3,4; 5.L.4,5,6

## GRADE 6

### Social Studies PALS—

1.A.1,2,B.4,5,C.7,8,D.10;

2.A.2,B.4,5,6,7,8,9,C10

Social Studies Content—1.2,3,4,5;

2.1ac,2,4b; 3.2,3; 4.2,4

### COMMON CORE

Language Arts—6.RI.1,2,4,5,7,8,10;

6.W.2,4,5,6,7,8,9,10; 6.SL.1,2,3,4;

6.L.4,5,6

Math Practice—1,2,4,6

Math Content—6.SP.4,5abc

## GRADE 7

### Social Studies PALS—

1.A.1,2,B.4,5,C.7,8,D.10;

2.A.2,B.4,5,6,7,8,9,C10

Social Studies Content—1.1,2,3,4,5;

2.1adef; 3.2; 4.4ac

### COMMON CORE

Language Arts—7.RI.1,2,4,5,7,8,10;

7.W.2,4,5,6,7,8,9,10; 7.SL.1,2,3,4;

7.L.4,5,6

## GRADE 8

### COMMON CORE

Language Arts—8.RI.1,2,4,5,7,8,10;

8.W.2,4,5,6,7,8,9,10; 8.SL.1,2,3,4;

8.L.4,5,6

Math Practice—1,2,4,6

Math Content—8.SP.4

## Materials

samples of food items that cannot be grown locally due to the climate—kiwi fruit, figs, coffee, bananas, chocolate, etc.

World maps with country boundaries and lines of longitude and latitude.

## Social Studies

1. Bring into the classroom items that cannot be grown locally due to the climate (kiwi fruit, figs, coffee, bananas, chocolate).
  - Ask students where they can purchase these items.
  - Review and discuss the term “import.”
  - Students will use maps and reference materials to locate the origin of each item.
  - Have ready a list of prices for each item. Write the prices only on the chalkboard. As you hold up each item, challenge students to match it with one of the prices listed on the board.
  - Students will hypothesize how the prices reflect the origin and availability of the items.
2. Read and discuss background and vocabulary.
3. Hand out student worksheets A and B.
  - Read through the directions with students.
  - Provide map pencils and world maps, with countries and boundaries marked.
  - Students will complete the student worksheets in groups of two or individually.
4. Hand out the Reading Page and student worksheet C.
  - Students will read the Reading Page and discuss latitude and longitude.
  - Students will use the world maps to locate countries mentioned on student worksheet A.
  - Students will complete student worksheet C.
5. Discuss the term “export.” Divide students into groups of four. Give the groups five minutes to brainstorm agricultural products that would be exports from Oklahoma (wheat, soybeans, cotton, beef, etc.)
6. Students will look at home for three things that would be considered imports. Students should write the name of each item, its use, and the country from which it originated.

## Math

1. Divide class into small groups. Each group will choose an item that cannot be grown in Oklahoma due to weather conditions.
  - Students will use online or library resources to find where the item grows.
  - Students will locate the area on a world map.
  - Students will monitor news reports for information about the area.
  - Discuss the following questions: Does the political climate create a change in the price? Does weather play a part in the price? Are there local factors that might affect the price (competition between local grocery stores)?
  - Students will chart the price of the item for a month, noting how the prices change and arranging the information on a number line. Groups will compare their data to determine if all items

change the same or if the results vary by item or region.

## Extra Reading

Andrews, Carolyn, *What is Trade? (Economics in Action)*, Crabtree, 2008.

Ehlert, Lois, *Market Day: A Story Told With Folk Art*, Voyager, 2002.

Haerens, Margaret (editor), *The World Trade Organization (Opposing Viewpoints)*, Greenhaven, 2010.

Miller, Debra A., *Fair Trade (Current Controversies)*, Greenhaven, 2010.

Silverman, Buffy, *Follow That Food: Distribution of Resources (Raintree Fusion: Social Studies)*, Heinemann-Raintree, 2007.

Thompson, Gare, *What is Supply and Demand? (Economics in Action)*, Crabtree, 2009.

Webster, Avril, *Off We Go to the Grocery Store*, Woodbine, 2011.

## Ag in Your Community

Invite a grocer to class to talk about factors that determine what foods show up in the grocery store.

Students will prepare questions ahead of time.

## Vocabulary

**accustomed**—familiar

**agricultural inspection agent**—an official whose job is to inspect food and make sure it is safe

**cargo**—the goods transported in a ship, airplane, or vehicle

**commerce**—the buying and selling of commodities on a large scale involving transportation from place to place.

**commodity**—a product of agriculture

**craving**—a strong desire

**customs**—duties or taxes paid on imports or exports

**demand**—the ability and desire to purchase goods or services at a specified time and price

**distribution**—the marketing of goods

**export**—to send or carry a commodity abroad for sale or trade.

**function**—to serve a certain purpose

**import**—to bring in or carry in from an outside source, to bring in goods from a foreign country for sale or trade

**produce**—fresh fruits and vegetables

**supply**—the quantity or amount of something that is needed or available

**trade**—the business of buying and selling items

**warehouse**—a building for the storage of goods

Name \_\_\_\_\_

# At Your Fingertips

# A

**import**—Products brought into one country from another country for trade or sale.

**export**—Products sent to foreign countries for trade or sale.

In the spaces provided, write whether the products mentioned in the following statements are imports or exports. Use colored pencils, a world map and Student Worksheet B to complete the instructions in each statement. Read and follow the directions carefully.

1. A garden center in Tulsa orders tulip bulbs from Amsterdam in The Netherlands. \_\_\_\_\_  
Draw a red arrow between Holland and Tulsa.
2. In 2012 Hong Kong remained the primary destination for United States in-shell pecan products while the largest market for shelled pecans continued to be Canada. \_\_\_\_\_ Draw a brown dotted line between Oklahoma and Hong Kong and between Oklahoma and Canada.
3. Coffee is served at the town cafe in Woodward. The coffee beans were grown in Colombia. \_\_\_\_\_  
Draw a black arrow between Colombia, South America, and Woodward.
4. Bison meat is sent to England, to be served in restaurants. \_\_\_\_\_ Draw an orange arrow between Oklahoma and England.
5. A home-based sweater business in McAlester orders the finest merino wool from Australia. . \_\_\_\_\_  
Draw a yellow arrow between Australia and McAlester.
6. Wheat is shipped from the United States to Russia. . \_\_\_\_\_ Draw a blue dotted arrow between Oklahoma and Russia.
7. Olive oil from Spain is a new item featured in an Oklahoma City grocery store. \_\_\_\_\_
8. Draw a green arrow between Spain and Oklahoma City.
9. Green tea is served during a business meeting in Lawton. Draw a brown arrow between China and Lawton. \_\_\_\_\_
10. Japan remained the top market for United States beef in 2013. \_\_\_\_\_ Producers saw exciting growth in this market. Draw a dotted red arrow between Oklahoma and Japan.
11. Cotton from Egypt can be found in a fabric store in Enid. \_\_\_\_\_ Draw a pink arrow between Egypt and Enid.

Oklahoma Ag in the Classroom is a program of the Oklahoma Cooperative Extension Service, the Oklahoma Department of Agriculture, Food and Forestry and the Oklahoma State Department of Education.

Name \_\_\_\_\_

# At Your Fingertips (answers)

# A

**import**—Products brought into one country from another country for trade or sale.

**export**—Products sent to foreign countries for trade or sale.

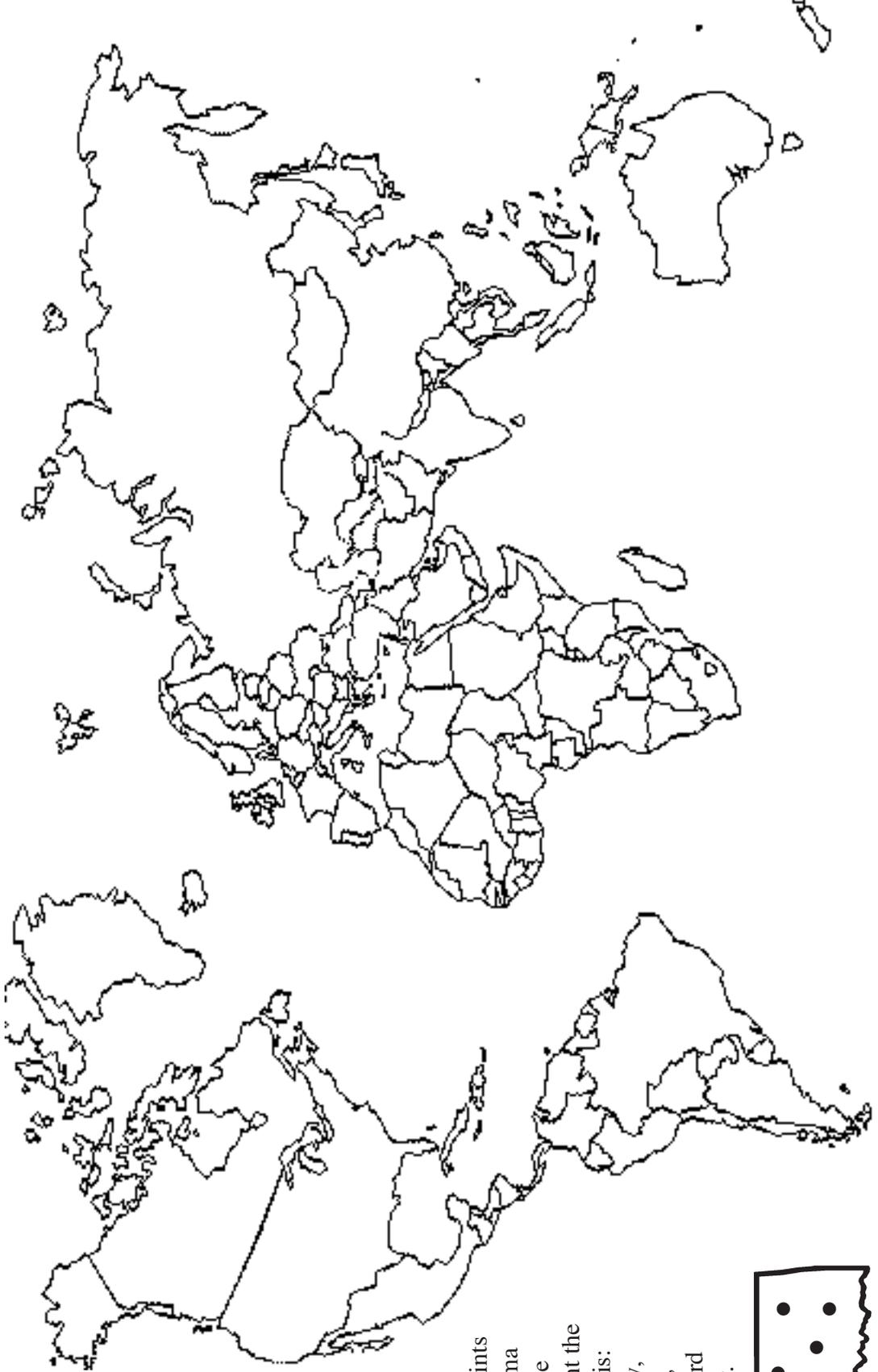
In the spaces provided, write whether the products mentioned in the following statements are imports or exports. Use colored pencils, a world map and Student Worksheet B to complete the instructions in each statement. Read and follow the directions carefully.

1. A garden center in Tulsa orders tulip bulbs from Amsterdam in The Netherlands. import Draw a red arrow between Holland and Tulsa.
2. In 2012 Hong Kong remained the primary destination for United States in-shell pecan products while the largest market for shelled pecans continued to be Canada. export Draw a brown dotted line between Oklahoma and Hong Kong and between Oklahoma and Canada.
3. Coffee is served at the town cafe in Woodward. The coffee beans were grown in Colombia. import Draw a black arrow between Colombia, South America, and Woodward.
4. Bison meat is sent to England, to be served in restaurants. export Draw an orange arrow between Oklahoma and England.
5. A home-based sweater business in McAlester orders the finest merino wool from Australia. import Draw a yellow arrow between Australia and McAlester.
6. Wheat is shipped from the United States to Russia. \_\_\_\_\_ Draw a blue dotted arrow between Oklahoma and Russia.
7. Olive oil from Spain is a new item featured in an Oklahoma City grocery store. \_\_\_\_\_
8. Draw a green arrow between Spain and Oklahoma City.
9. Green tea is served during a business meeting in Lawton. Draw a brown arrow between China and Lawton. \_\_\_\_\_
10. Japan remained the top market for United States beef in 2013. \_\_\_\_\_ Producers saw exciting growth in this market. Draw a dotted red arrow between Oklahoma and Japan.
11. Cotton from Egypt can be found in a fabric store in Enid. \_\_\_\_\_ Draw a pink arrow between Egypt and Enid.

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Name \_\_\_\_\_

# At Your Fingertips      B



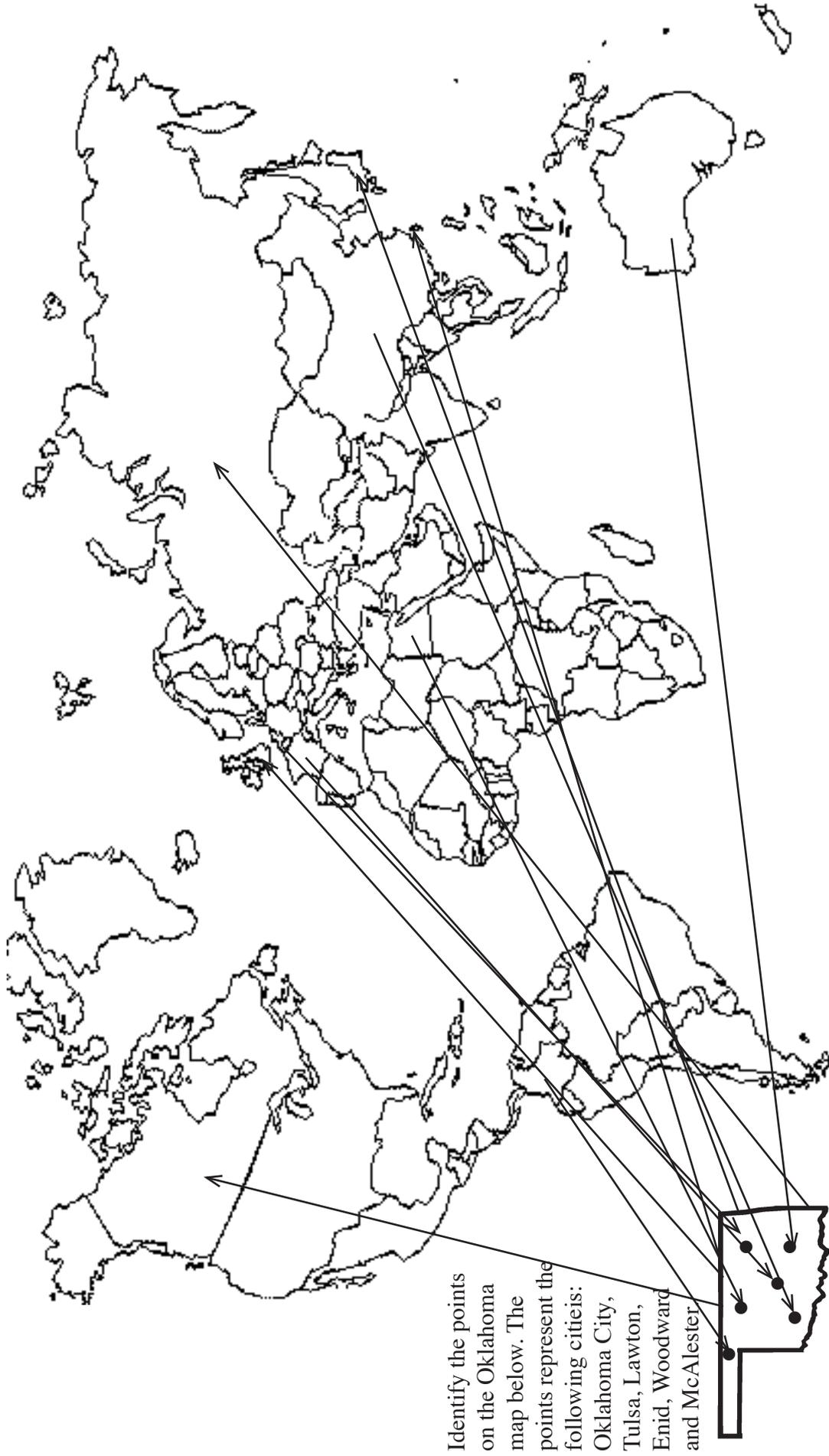
Identify the points on the Oklahoma map below. The points represent the following cities: Oklahoma City, Tulsa, Lawton, Enid, Woodward and McAlester.



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Name \_\_\_\_\_

# At Your Fingertips (answers) **B**



Identify the points on the Oklahoma map below. The points represent the following cities: Oklahoma City, Tulsa, Lawton, Enid, Woodward and McAlester

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# At Your Fingertips

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Use a world map with lines of longitude and latitude to locate the countries mentioned in student worksheet A. Longitude is the distance measured by degrees or time east or west from the prime meridian. Recall that lines of longitude run north and south on the earth, and lines of latitude run east and west. Latitude is the distance north or south from the equator measured in degrees. These lines create an imaginary grid to mark the location of places on the earth.

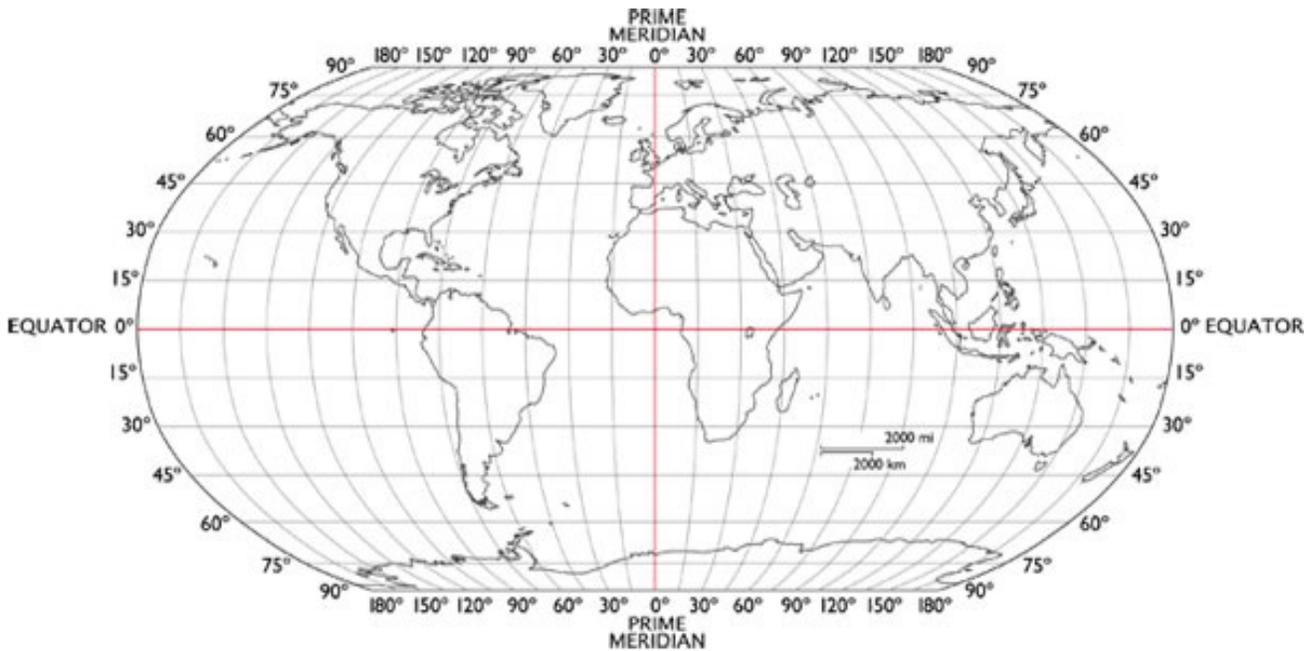
On a map, latitude lines run horizontally. Latitude lines are also known as parallels since they are parallel and are an equal distant from each other. Each degree of latitude is approximately 69 miles (111 km) apart; Degrees latitude are numbered from 0° to 90° north and south. Zero degrees is the equator, the imaginary line which divides our planet into the northern and southern hemispheres.

The vertical longitude lines are also known as meridians. They converge at the poles and are widest at the equator (about 69 miles or 111 km apart). Zero degrees longitude is located at Greenwich, England. The degrees continue 180° east and 180° west where they meet and form the International Date Line in the Pacific Ocean.

Name \_\_\_\_\_

# At Your Fingertips

C



1. What country will you find at 30 degrees south latitude and 135 degrees east longitude?

Colombia                  Australia                  China

2. What country will you find at 45 degrees north latitude and 105 degrees east longitude?

Australia                  Holland                  China

3. What country will you find at 10 degrees north latitude and 75 degrees west longitude?

Spain                  China                  Colombia

4. Zero degrees longitude is located in which country?

China                  England                  Australia

5. What country will you find at 40 degrees north latitude and 100 degrees west longitude?

Spain                  England                  United States