Christina School District Assignment Board

Student's First & Last Name_____ Student ID/Lunch # _____ School _____ Grade_____

Grade Level: 6th

Week of May 25th, 2020

		No School	Day 1	Day 2	Day 3	Day 4
ELA			This week we will explore the 2020 US Census and main ideas and themes. Read and respond in a paragraph to both of the prompts below. 1. Can you think of any groups that are kept from being citizens or having the full rights of citizens in the United States today? 2. Why do you think there are still restrictions given the laws protecting citizenship?	Read the article "**Pro/Con".** As you read underline examples of people facing challenges with accessing citizenship or the rights of citizenship. Annotate questions, comments or connections you have to these challenges. Summarize the text and answer questions 1-4.	Read the article **"We are Still Here".** As you read underline examples of people facing challenges with accessing citizenship or the rights of citizenship. Annotate questions, comments or connections you have to these challenges. Summarize the text and answer questions 1-4.	**Writing** Which citizenship issues do you feel are most important to address right now? Cite evidence from the articles in your response.
Math	**6**		*Inverse Operations* *A*nswer "Which One Doesn't Belong?" and justify your choice. (attached) Complete 7-79 and 7-80. (attached)	Complete 7-81, 7-82, and 7-83. (attached)	Complete 7-84, 7-86, and 7-87. (attached)	Journal Entry: Give a definition of inverse operations in your own words. Then give several examples of inverse operations to demonstrate your understanding. Title this entry "Inverse Operations" and label it with

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						today's date.
	6+		*Multiplication with Decimals* Answer "Which One Doesn't Belong?" and justify your choice. (attached) Without a calculator, complete 3-64, 3-65, and 3-66. (attached)	Without a calculator, complete 3-67, 3-68, 3-69, and 3-70. (attached)	Without a calculator, complete 3-71, 3-72, 3-73, and 3-74. (attached)	Complete Puzzle Investigator Problem (PIP) 8 - Pascal's Triangle (attached)
Science			**How Does Erosion Happen? (part 1):** Read article. In YELLOW, highlight or underline details about erosion by water In GREEN, highlight or underline details about erosion by wind. In RED, highlight or underline details about erosion by ice. In BLUE, highlight or underline details about erosion by people.	**How Does Erosion Happen? (part 2):** Reread article and/or notations as necessary. Write your best answer to the following: In California, there have been large wildfires. Following the wildfires, there is an increased risk for landslides. Why would this be? Use the text to help you explain the increased risk.	**How Does Erosion Happen? (part 1):** Reread article and/or notations as necessary. Write your best answers to the following: a) What is sediment? b) Which of the following are true? 1) Weathering and erosion can take a long time. 2) Weathering and erosion can make dramatic changes to a landscape. 3) Weathering and erosion can be dangerous for people. Explain your answer(s). c) What effect didi past ice ages have on the Northern Hemisphere? d) How is climate change affecting glaciers?	**Zhangjiajie National Forest Park:** Observe the image of Zhangjiajie National Forest Park (attached), which is located in China. Write down your thoughts on what geological process could have shaped this formation of towering sandstone pillars.
Social Studies			Complete Activity 1 from the document titled, "Partnerships and Partitions-PART 1"	Complete Activity 2, Draw Borders & Questions to Ponder from the document titled, "Partnerships and Partitions-PART 1"	Complete Activity 3, Check for Understanding from the document titled, "Partnerships and Partitions-PART 1"	Complete Activity 4, Thought Questions & Activity 5, Check for Understanding from the document titled, "Partnerships and Partitions-PART 1"

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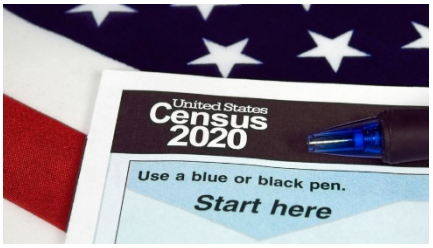
PRO/CON: Should our next census ask about citizenship status?



PRO: The question allows the government to properly disburse needed funds and services

Every 10 years, the U.S. government conducts a census. The census is a series of questions that helps determine the population of each state. It's important for deciding how many representatives each state gets in Congress, among other uses.

The U.S. Census Bureau plans to include a question on the 2020 census asking whether the respondent is a U.S. citizen.

Census takers have been asking that question on one survey or another since the very first census. Even so, some people have a problem with it. They shouldn't. Such a question could be very helpful for those who help make laws. For example, it can help count how many people lack health insurance to help them afford going to the doctor.

The Census Bureau included a citizenship question through 1950. It stopped in 1960 in the hopes of increasing response rates. The question was still included on what is called the "long form" census in 1970, which went to fewer households.

In 2005, the citizenship question was added to the American Community Survey, an annual survey of a very small percentage of households.

The 10-year census has not included a citizenship question for decades now. Because of this, the government does not know how many of the respondents are citizens, non-citizens in the U.S. legally, or undocumented and in the U.S. illegally.

Health Care Coverage

During health care reform debates in the past, some of us pointed out that perhaps 25 percent of those without insurance were undocumented. That means they are unlikely to be covered by health insurance reform efforts. Sure enough, "Obamacare" excluded them from receiving health insurance discounts.

Obamacare, also known as the Affordable Care Act, is the health care law signed into law by President Barack Obama in 2010. The goal of Obamacare was to help more families get insurance and to make sure that people who were already sick could still get insurance.

Even today, there are perhaps 8 million people in the country illegally who don't have health insurance. As it stands, they will simply remain uninsured.

The Census Bureau's annual American Community Survey does ask a citizenship question. While more frequent, those surveys are limited samples, about 3.5 million out of roughly 126 million households. The smaller sample numbers are then used to draw conclusions about the country as a whole. Even then, though, the bureau doesn't include an estimate of the uninsured who are in the U.S. illegally.

The result is that estimating the number of uninsured who are in the country illegally has mostly been a guessing game.

Helpful In Making Policy Decisions

The issue is not limited to health insurance, though. The federal government funds a number of programs where taxpayer money supports immigrants in the country illegally. Knowing how many undocumented people are receiving those funds could help inform government decisions.

A citizenship question might discourage some participation. The Census Bureau has increasingly used various methods, statistical and otherwise, to fill in the gaps, though.

Some form of a citizenship question has been around for two centuries. Asking it on the census once again would help take a little of the guesswork out of many of our government rule-making challenges.

Merrill Matthews is a resident scholar with the Institute for Policy Innovation. He holds a Ph.D. in the humanities from the University of Texas.

CON: Such questions don't belong in a free country's census

For the first time since the 1950 census, the 2020 census will include a question about whether a respondent is a citizen.

The Trump administration explained some worrying plans for the 2020 census when Commerce Secretary Wilbur Ross spoke before lawmakers in 2017. Ross runs the Commerce Department, which is in charge of the U.S. Census Bureau. Ross said that he wanted census data to be "re-used" by other government departments and private businesses.

The inclusion of a citizenship question in the 2020 census is worrying. So is the willingness of the government to "re-use" census data for other purposes. For example, the data could be used to locate groups of non-citizens.

Federal law prohibits sharing census data with other government agencies. For those who believe census data abuse cannot happen, it should be noted that it has already occurred quite recently in the United States.

Census Data Used For Other Purposes

In 2004, the Department of Homeland Security (DHS) requested census data from 2000 on Americans of Arab descent. Using the census data, DHS was able to figure out where the Arab-Americans lived.

Using 1940 census data, the federal government rounded up some 120,000 Japanese-American citizens. The government put Japanese-Americans in internment camps during World War II.

President Donald Trump and other high-ranking officials often say hateful things about people from other countries. Because of this, it's safe to say that collecting citizenship information can only have a harmful intent.

The official reason given by Trump's team is that the Justice Department needs citizenship data so it can enforce the Voting Rights Act by determining who is able to vote. There's no way this is true.

The Justice Department is led by Attorney General Jeff Sessions. He has a shameful record in Alabama of opposing civil rights and voting rights. Nothing suggests he now wants to help African-Americans and other minorities vote.

Some States Oppose Citizenship Question

States and cities are right in fighting the Trump administration's unconstitutional citizenship question in court. At least 17 states have filed lawsuits against the citizenship question. Former Census Bureau directors, both Republicans and Democrats, have cautioned against asking about citizenship.

The name Jacques Fauvet is not known to many Americans. However, in France, Fauvet was known for continually warning against the misuse of census data.

Fauvet oversaw French data protection from 1984 to 1999. He pointed out that when the German Nazis took over France in 1940, one of their first acts was to seize as many detailed census records as possible.

From these records, the Nazis were able to construct their lists of who would be arrested and taken to the concentration camps. Enough said!

A graduate of the University of Mississippi, Wayne Madsen is a progressive commentator whose articles have appeared in a wide range of American and European newspapers.

Digging Deeper

Instructions: Choose the answer below that best answers the question.

1. How does the PRO author convey the importance of asking about citizenship on the census?

A. by summarizing the positive effects of the citizenship question while it was in use in the past

B. by highlighting evidence that the short-form community surveys collect inaccurate data

C. by acknowledging that the question might discourage some people from participating in the census

D. by arguing that knowing more would help the government determine who needs health care coverage

2. How does the CON author point out a weakness in the government's argument that the citizenship question will help people?

A. The census data might be reused by government departments and businesses.

B. The record and actions of the president and other officials contradict this idea.

C. Federal law prohibits the sharing of census data with other government agencies.

D. Jacques Fauvet warned that no government collects census data for good reasons.

3. The PRO author claims that asking whether people responding to the census are citizens would take the guesswork out of government rule-making challenges. Is there relevant and sufficient evidence to support this point?

A. The author provides more than enough evidence that asking about citizenship would help the government by providing facts and statistics about the number of undocumented people receiving funds.

B. The author provides evidence that asking about citizenship would help the government by illustrating how challenges to rule-making and programs have risen since the question was eliminated.

C. The author provides some evidence that the government has to rely on estimates for its calculations, but does not provide evidence that asking the question would be more effective than this kind of analysis.

D. The author provides no evidence that including a citizenship question would take the guesswork out of creating rules and programs, choosing to focus instead on how it would help voting rights.

4. Which piece of evidence is MOST relevant to the CON author's argument?

A. Ross runs the Commerce Department, which is in charge of the U.S. Census Bureau. Ross said that he wanted census data to be "re-used" by other government departments and private businesses.

B. Using 1940 census data, the federal government rounded up some 120,000 Japanese-American citizens. The government put Japanese-Americans in internment camps during World War II.

C. The Justice Department is led by Attorney General Jeff Sessions. He has a shameful record in Alabama of opposing civil rights and voting rights.

D. The name Jacques Fauvet is not known to many Americans. However, in France, Fauvet was known for continually warning against the misuse of census data.

"We are still here": Native Americans fight to be counted in U.S. census

In 2017, President Donald Trump signed an executive order that reduced government protections of national monuments. He reduced the size of Bears Ears and Grand Staircase-Escalante national monuments in Utah by nearly 2 million acres. Trump claimed the law was supported by the state and local county government where the monuments are located.

However, on the ground, many people were opposed to this action.

Native Americans account for a majority of the population in San Juan County, Utah. The county includes parts of the reservations of the Navajo Nation and the Ute Mountain Ute Tribe. Both tribes officially support the protection of Bears Ears. Through gerrymandering, the majority Native American county had a majority white board of county officials.

Gerrymandering is the dividing of an area into election districts in a way that gives one political party an unfair advantage.

Last year, everything changed. The Navajo Nation brought a lawsuit against San Juan, accusing the county of racial gerrymandering under the Voting Rights Act of 1965. The law prohibits racial discrimination in voting. The tribe won. The county was forced to redraw its election maps. In the fall of 2018, for the first time ever, the county elected a majority Native American board of county officials. The board now officially supports the protection of Bears Ears.

Fighting For Political Representation

Today, the Navajo Nation is still fighting for political representation using the U.S. census, which will take place this year. Census data helped the tribe win the lawsuit by showing that the election maps had reduced the voting power of Native American residents. The information also determines the tribe's representation in many other bodies of government, including Congress.

According to the U.S. Constitution, all residents living in the United States must be counted every 10 years. The results of the census determine seats in Congress, local election maps and how much government money an area will receive for the next 10 years. Despite the power of the U.S. census, Native Americans have historically been undercounted.

"It impacts everything," Charlaine Tso said. Tso represents District 9 on the Navajo Nation's tribal council. "It impacts education, roads and maintenance, elder care, funding for everything on our reservation."

Tso serves on the Navajo Nation's Complete Count Commission for the 2020 census. The committee believes Navajos were significantly undercounted in the 2010 census, which ended up lowering government funding levels for the tribe. "We know for sure that it was nowhere near accurate. That margin, imagine what difference it makes in federal funding."

The problem is not unique to the Navajo Nation. An estimated 1 in 7 Native Americans living on tribal lands were not counted in the last U.S. census, making Native Americans the group most likely to be missed.

Living In "Hard-To-Count" Areas

An estimated 1 in 3 Native American people live in what the Census Bureau considers "hard-to-count" rural census tracts. In many states with large indigenous populations, more than half of Native American residents live in such "hard-to-count" areas.

Native Americans are also disproportionately affected by other factors such as poverty, housing insecurity and even age. Forty-two percent of Native Americans are under the age of 24.

Desi Rodrigues-Lonebear is a member of the Northern Cheyenne tribe and a demographer, which is an expert in changing human populations. She advised the Census Bureau for six years. She says another big factor is lack of trust.

"You're trying to convince people, your own relatives even, who for their whole lives wanted nothing else but to be left alone by the feds," Rodrigues-Lonebear said. "And you're coming to them and saying, 'But we really need you to fill out this form. We really need you to count.'"

Many tribal leaders and advocates are worried the undercount could be even worse in 2020. For the first time ever, the census will be mostly online. However, more than a third of Native Americans living on tribal land lack access to the internet, making it the least-connected part of the United States.

Reduced Funding For Translation Services

"It [the census] moving online almost ensures an undercount of Native Americans of historic proportions," said Natalie Landreth. She is a Chickasaw Nation member and a lawyer for the Native American Rights Foundation (NARF).

Government funding for translation into Native American languages was also reduced this year, only offering translation services to the Navajo language, according to NARF. Before, the bureau has funded translation services into many indigenous languages.

"There are census tracts in Alaska where 75 percent of the households don't speak English at home," says Landreth.

According to Jessica Imotichey, a Chickasaw Nation member and a coordinator for the L.A. region of the U.S. Census Bureau, the agency is working to ensure Native Americans are counted in 2020. "[The census] is about representation, not just politically but also visibility," Imotichey said. "Recognizing Native Americans and Alaskan Natives, that we are still here, that we still remain."

Undercounts Mean Millions Of Dollars Lost

The census started three months early in remote Alaska in January. Workers traveled to Alaskan native villages to count residents in person. While only 0.02 percent of the U.S. population will be counted in person, the majority of them will be indigenous.

Funding for census outreach campaigns varies significantly by location. While some states like California are planning to spend $187 million on census outreach, 24 states have budgeted nothing. Three of those states, Oklahoma, North Dakota and South Dakota, have significant Native American populations.

New Mexico, along with Alaska, was the most undercounted state in 2010. Some counties returned less than 50 percent of census surveys. According to New Mexico Counts 2020, just a 1 percent undercount in 2020 could result in the loss of $750 million in government aid to the state.

The Navajo Nation's Complete Count Commission has already met with U.S. senators and regional Census Bureau representatives. They discussed the unique challenges of counting Navajo citizens. The tribal government is looking to hire a sizable outreach team this spring, with an emphasis on hiring fluent Navajo speakers, according to Tso.

"We have to do everything possible to count every Navajo," Tso said.

Digging Deeper

Instructions: Choose the answer below that best answers the question.

1. Which section of the article BEST explains why tribal leaders expect the 2020 census to leave out even more Native Americans?

A. Introduction [paragraphs 1-5]

B. "Fighting For Political Representation"

C. "Reduced Funding For Translation Services"

D. "Undercounts Mean Millions Of Dollars Lost"

2. Select the paragraph from the section "Living In Hard-To-Count Areas" that explains why some Native Americans might NOT want to participate in the census.

A. An estimated 1 in 3 Native American people live in what the Census Bureau considers "hard-to-count" rural census tracts. In many states with large indigenous populations, more than half of Native American residents live in such "hard-to-count" areas.
B. Native Americans are also disproportionately affected by other factors such as poverty, housing insecurity and even age. Forty-two percent of Native Americans are under the age of 24.
C. "You're trying to convince people, your own relatives even, who for their whole lives wanted nothing else but to be left alone by the feds," Rodrigues-Lonebear said. "And you're coming to them and saying, 'But we really need you to fill out this form. We really need you to count.'"
D. Many tribal leaders and advocates are worried the undercount could be even worse in 2020. For the first time ever, the census will be mostly online. However, more than a third of Native Americans living on tribal land lack access to the internet, making it the least-connected part of the United States.

Which two of the following sentences from the article include CENTRAL ideas of the article?

1. Despite the power of the U.S. census, Native Americans have historically been undercounted.
2. Native Americans are also disproportionately affected by other factors such as poverty, housing insecurity and even age.
3. Many tribal leaders and advocates are worried the undercount could be even worse in 2020.
4. While some states like California are planning to spend $187 million on census outreach, 24 states have budgeted nothing.

    A. 1 and 3
    B. 1 and 4
    C. 2 and 3
    D. 2 and 4

Which statement would be MOST important to include in a summary of the article?

A. Native Americans make up a majority of people who live in San Juan County in Utah.
B. Native American groups are working hard to get political representation through the U.S. census.
C. Many Native Americans were against the reduction of Bears Ears and Grand Staircase-Escalante national monuments.
D. Many Native Americans in Alaska will be counted in person for the 2020 U.S. census.

Math 6 – Week of May 25th

Inverse Operations

Which One Doesn't Belong? Why?

multiply	divide
subtract	solve

7-79 THE MATHEMATICAL MAGIC TRICK - Have you ever seen a magician perform a seemingly impossible feat and wondered how the trick works? Follow the steps below to participate in a math magic trick.

Pick a number and write it down.
Add five to it.
Double the result.
Subtract four.
Divide by two.
Subtract your original number.
What did you get?

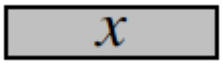
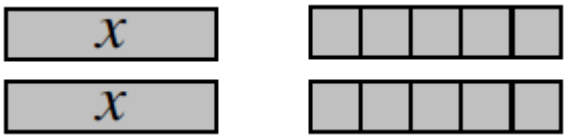
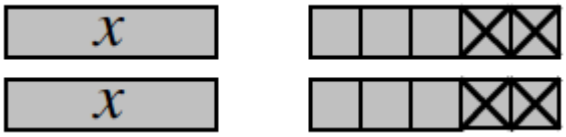
a. Does this trick seem to work no matter what number you pick? Test it with different numbers. Consider numbers that you think might lead to different answers, including zero, fractions, and decimals. Keep track in the table below.

Steps	Trial 1	Trial 2	Trial 3
1. Pick a number.			
2. Add 5.			
3. Double it.			
4. Subtract 4.			
5. Divide by 2.			
6. Subtract the original number.			

b. Which steps made the number you chose increase? When did the number decrease? What connections do you see between the steps in which the number increased and the steps in which the number decreased?

c. Consider how this trick could be represented with math symbols. To get started, think about different ways to represent just the first step, "Pick a number."

7-80 Now you get to explore why the magic trick from problem 7-79 works. Shakar decided to represent the steps with algebra tiles. Since he could start the trick with any number, he let an x-tile represent the "Pick a number" step. With your team, analyze his work with the tiles. Then answer the questions below.

Steps	**Trial 1**	**Trial 2**	**Trial 3**	**Algebra Tile Picture**
1. Pick a number.				
2. Add 5.				
3. Double it.				
4. Subtract 4.				
5. Divide by 2.				
6. Subtract the original number.				

a. For the second step, "Add 5," what did Shakar do with the tiles?

b. What did Shakar do with his tiles to "Double it"? Explain why that works.

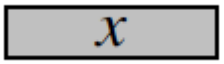
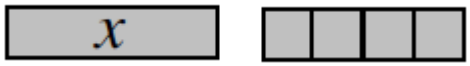
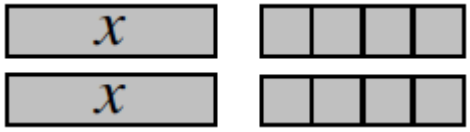
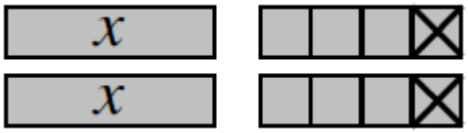
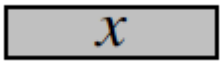
c. How can you tell from Shakar's table that this trick will always end with 3? Explain why the original number does not matter.

7-81 The table below has the steps for a new "magic trick."

Steps	Trial 1	Trial 2	Trial 3	Algebra Tile Picture
1. Pick a number.				
2. Add 2.				
3. Multiply by 3.				
4. Subtract 3.				
5. Divide by 3.				
6. Subtract the original number.				

a. Pick a number and place it in the top row of the "Trial 1" column. Then follow each of the steps for that number. What was the end result?
b. Now repeat this process for two new numbers in the "Trial 2" and "Trial 3" columns. Remember to consider trying fractions, decimals, and zero. What do you notice about the end result?
c. Use algebra tiles to see why your observation from part (b) works. Let an *x*-tile represent the number chosen in Step 1 (just as Shakar did in problem 7-80). Then follow the instructions with the tiles. Be sure to draw diagrams on your resource page to show how you built each step.
d. Explain how the algebra tiles help show that your conclusion in part (b) will always be true no matter what number you originally select.

7-82 Now reverse your thinking to figure out a new "magic trick."

Steps	Trial 1	Trial 2	Trial 3	Algebra Tile Picture
1. Pick a number.				
2.				
3.				
4.				
5.				
6.				

a. Use words to fill in the steps of the trick like those in the previous tables.
b. Use your own numbers in the trials, again considering fractions, decimals, and zero. What do you notice about the result?
c. Why does this result occur? Use the algebra tiles to help explain this result.

7-83 In the previous math "magic tricks," did you notice how *multiplication* by a number was later followed by *division* by the same number? These are known as **inverse operations** (operations that "undo" each other).

a. What is the inverse operation for addition?
b. What is the inverse operation for multiplication?
c. What is the inverse operation for "Divide by 2"?
d. What is the inverse operation for "Subtract 9"?

7-84 Now you get to explore one more magic trick. For this trick:

- Complete three trials using different numbers. Use at least one fraction or decimal.
- Use algebra tiles to help you analyze the trick, as you did in problem 7-81. Draw the tiles in the table on the resource page.
- Find at least two pairs of inverse operations in the process that are "undoing" each other.

Steps	Trial 1	Trial 2	Trial 3	Algebra Tile Picture
1. Pick a number.				
2. Double it.				
3. Add 4.				
4. Multiply by 2.				
5. Divide by 4.				
6. Subtract the original number.				

7-86 Recall that inverse operations "undo" each other. Write the inverse operation for each situation below.

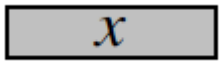
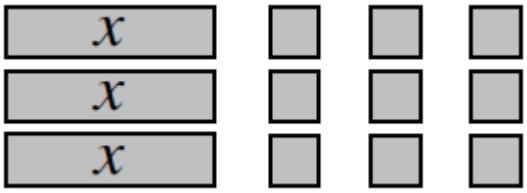
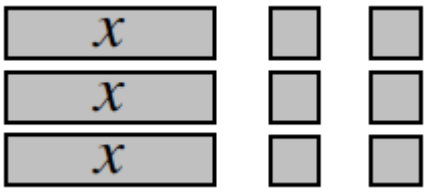
a. Add 34.

b. Subtract 123.

c. Divide by 8.

d. Multiply by 12.

7-87 Look carefully at the algebra tiles to fill in each of the steps. Use your own numbers in the trials, again considering fractions, decimals, and zero.

Steps	Trial 1	Trial 2	Trial 3	Algebra Tile Picture
1. Pick a number.				
2. Add ____.				
3. Multiply by ____.				
4. Subtract ____.				
5. Divide by ____.				
6. Subtract the original number.				

Math 6+ – Week of May 25th

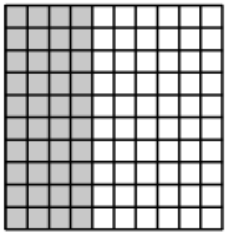
Multiplication with Decimals

Which One Doesn't Belong? Why?

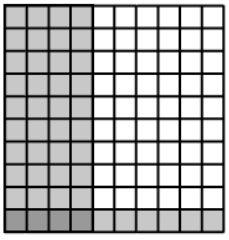
16%	0.160
16/100	4/25

3-64 Howard went to the mall and saw a banner announcing, "ALL SPORTING GOODS: ONE TENTH OFF!" He saw a pair of roller-blade laces for $0.40 and wanted to find out how much he would save. With your team, follow the steps below to help Howard determine his savings. See Resource Page 3.2.4 at the back of this packet for hundredths grids to complete work.

a. What is the perimeter of each hundredths grid? What is the area?
b. What do each of the small squares in the grid represent? Write your answer in three forms (fraction, decimal, and percent).
c. Why do you think these are called "hundredths grids?"
d. Forty cents (the cost of Howard's laces) can also be written as 0.40, or simply 0.4. On your resource page of hundredths grids, lightly shade and label 0.4 or 4/10 vertically, as shown in the diagram at right.



e. Next, in the other direction, lightly shade and label 1/10 of the grid as shown in the diagram at right. What is the fraction of the grid that is darkly shaded? What is the decimal equivalent of the part of the grid that is darkly shaded?



f. Write two equations that represent this process, one using fractions and one using decimals.

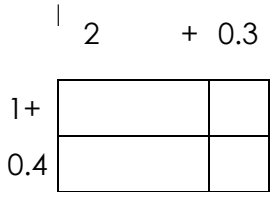
g. How much money will Howard save with the laces on sale?

3-65 While in the sporting-goods store, Howard found some new running shoes advertised to weigh only 70% as much as his old running shoes. His old shoes weighed 0.8 kg. Use the problems below to determine how much these new shoes weigh.

a. Use a hundredths grid to find 70% of 0.8 kg.
b. Write a fraction equation for this problem. Label the answer with correct units.
c. Write a decimal equation for this problem. Label the answer with correct units.
d. Do the new shoes weigh more or less than the old shoes? How much more or less?

3-66Another way to think about decimal multiplication is with a generic rectangle.

a. What multiplication problem is represented by the generic rectangle shown below? On your paper, copy this rectangle and write the multiplication problem it represents.



b. Fill in the areas of each of the four sections. What math problem does each smaller section represent?

c. Write the total area as both a sum and a product. Does your answer make sense?
d. Use the standard paper-and-pencil method of multiplying 2.3 by 1.4. Do not use a calculator. Where do you see the numbers from this standard algorithm in the generic rectangle?

3-67 Judy is working on part (d) of problem 3-66 and is trying to make sense of the standard algorithm for decimal multiplication. Her work so far is shown at right.

$$\begin{array}{r} {\scriptstyle 1}\\ 2.3\\ \times\ 1.4\\ \hline 92\\ 230 \end{array}$$

"Wait a minute," Judy said, *"I multiplied* 2.3 *by* 0.4 *and then by* 1. *How in the world could those products be* 92 *and* 230*? That just doesn't make sense."*

a. The decimal points are usually left out of a multiplication problem until the last step. You can see that Judy left them out in her work above. If the decimal points were to be put in, where would they go in each line of her work? That is, is 2.3 times 0.4 equal to 92, 9.2, or 0.92? And then in the next line, is 2.3 times 1.0 equal to 230, 23.0, or 2.30?
b. Copy Judy's work on your paper and place the decimal points in the correct locations. Then complete the work. What is 2.3 times 1.4?

3-68 When multiplying decimals, how do you know where to place the decimal point? Think about this as you do parts (a) through (d) below.

a. Write two equations for multiplying 0.3 by 0.16. One equation should express the factors and product using decimals, and one using fractions.
b. In part (a), you multiplied tenths by hundredths to get thousandths. Do you always get thousandths if you multiply tenths by hundredths? Why or why not? What do you get if you multiply tenths by tenths? Hundredths by hundredths? Use several examples to justify your answers.
c. When a multiplication problem is written using decimals, there is a relationship between the number of decimal places in the parts (or factors) of the problem and the number of decimal places in the answer (or product). Describe this relationship.
d. Describe a shortcut for locating the decimal point in the answer to a problem involving decimal multiplication.

3-69 For each of the following problems, use a hundredths grid if needed. Write both a fraction and a decimal equation with your answer.

a. (0.3) (0.6)

b. (0.5) (−0.4)

c. (−0.2) (−0.7)

3-70 Jerry's teacher gave him the problem (−2.4) (5.3). He decided to use a generic rectangle to find the answer. He used the generic rectangle below and found that (−2.4) (5.3) = −8.48.

	−2	+ 0.4
5 +	−10	2.0
0.3	−0.6	0.12

−10+2.0−0.6+0.12=−8.48

Jerry's teammate Ron knows that (2.4) (5.3) =12.72, so he thinks that the answer to (−2.4) (5.3) is −12.72. Who is correct, and what was the mistake that was made by the incorrect student?

3-71 Draw generic-rectangle diagrams and write equations to find the following products.

a. (−6.5) (−4.7)

b. (−3.8) (4.4)

3-72 Howard, in his new lightweight running shoes, was able to walk at the rate of 0.83 meters per second. His coach timed his walking at this steady pace for 12.2 seconds. How far did he walk during that time? Use paper and a pencil to show your work, and then check your answer with a calculator.

3-73 Use what you learned during today's lesson to answer the following questions.

a. Show (2.3) (5.06) as a fraction multiplication problem and explain why the answer is in thousandths (three decimal places).
b. Show (0.004) (3.42) as a fraction multiplication problem and explain why the answer is in hundred-thousandths (five decimal places).

3-74 Mentally calculate the following products. Use the rule for decimal multiplication to write an equation in which the decimal point is written in the correct location.

a. (−0.04) (−0.1)

b. (0.03) (−0.02)

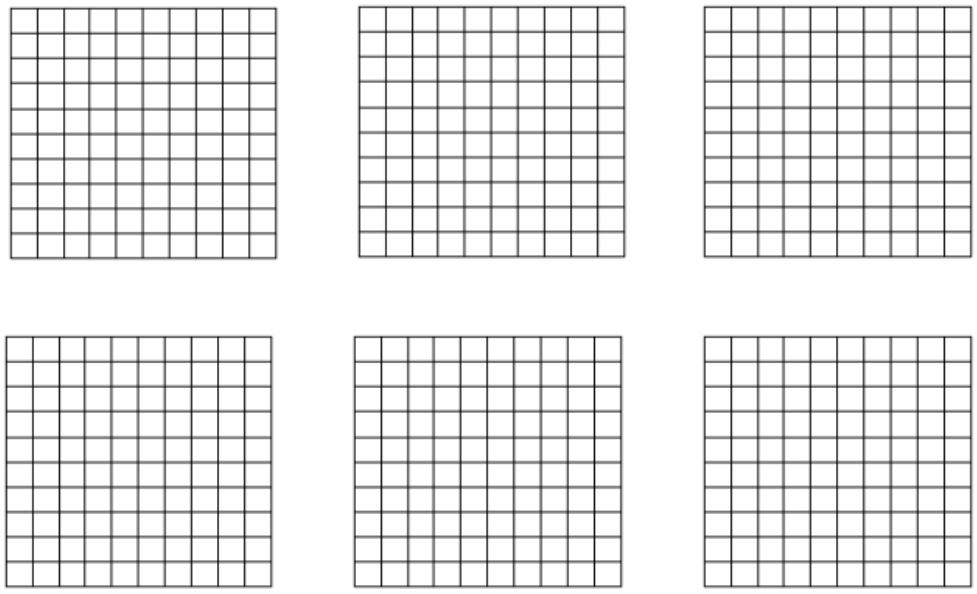
c. (0.7) (0.4)

d. Stacey said, "*Stephanie, look at my answer to the last problem,* 0.7·0.4=0.28. *Usually when I multiply, I get a bigger answer than the numbers I start with. Twenty-eight hundredths,* 0.28*, is less than either* 0.4 *or* 0.7. *I must have made a mistake.*"

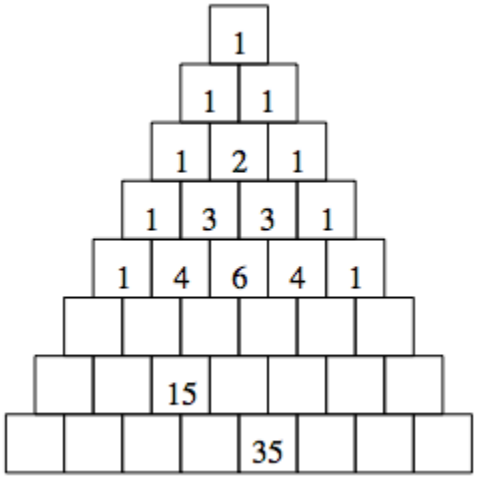
Stephanie responded, "*Well, one half times one half is one fourth, and one fourth is less than one half. I think when you multiply by a fraction or decimal less than one, you get less than you started with.*" Write a sentence or two about who you think is correct and why.

Lesson 3.2.4 Resource Page

Hundredths Grids



The number pattern started at right is Pascal's Triangle. While it looks like simple arrangement of numbers, it has interesting patterns within it. In this challenge, you will learn more about the hidden patterns of Pascal's Triangle.



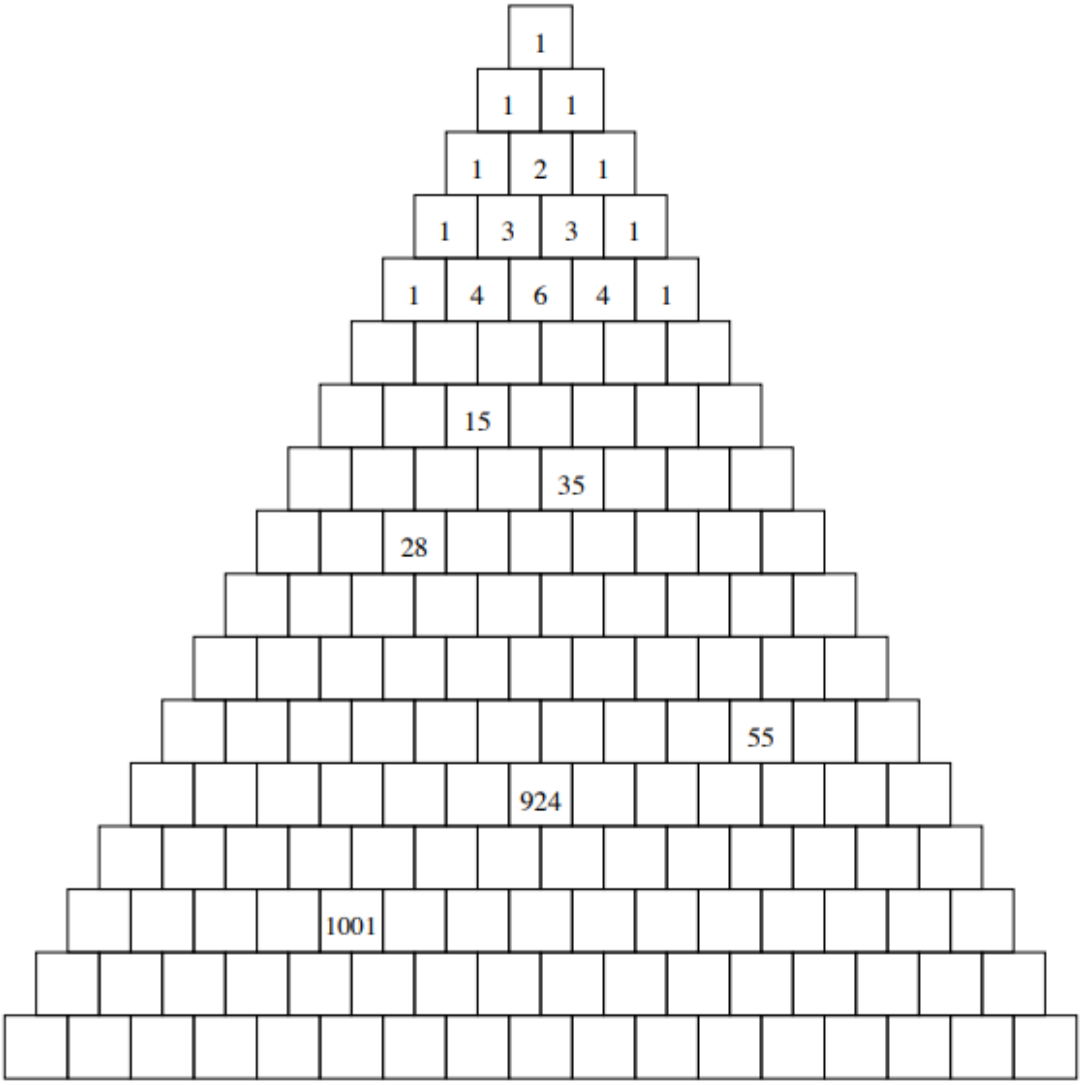
a. Using the PI-8 Resource Page, use the patterns to complete the missing numbers. Some of the numbers are given so you can check your work.

b. What is the sum of the 20th row of the triangle? Can you find this without extending the triangle? Explain how you found your answer.

c. Using a see-through highlighter, color in the squares that contain odd numbers. Describe the pattern that emerges.

d. Find at least three other patterns in Pascal's Triangle that you have not described so far.

PASCAL'S TRIANGLE



How does erosion happen?

By National Geographic, adapted by Newsela staff on 10.03.17
Word Count **799**
Level **930L**

These rock formations, in Bryce Canyon National Park, Utah, are called hoodoos. Although the soft sandstone was carved away by the erosion of wind, water and ice, tall hoodoos stand as the result of sturdy limestone caps protecting the sandstone underneath. Photo by: Luca Galuzzi - www.galuzzi.it from Wikipedia.

Erosion causes the earth to be worn away, often by water, wind or ice. A similar process, called weathering, breaks down or dissolves rock. Weathering also weakens rock or turns it into tiny fragments. No rock is hard enough to resist weathering and erosion. Together, they shaped the sharp peaks of the Himalaya mountains in Asia and the spectacular rock towers of Bryce Canyon, in the U.S. state of Utah.

Erosion moves bits of rock or soil from one place to another. Most erosion is caused by water, wind, or ice usually in the form of a glacier. If water is muddy, it is a sign that erosion is taking place. It indicates that bits of rock and soil are floating in the water. This material is called sediment.

When wind or water slows down, or ice melts, sediment is deposited in a new location. As the sediment builds up, it creates fertile land.

Erosion By Water

Moving water is the major agent of erosion. Rain carries away bits of soil and slowly washes away rock fragments. Rushing streams and rivers wear away their banks, creating larger and larger valleys. Over 5 million years, the Colorado River cut deeper and deeper into the land and eventually formed the Grand Canyon. The Grand Canyon is more than 1 mile deep and as much as 18 miles wide in some places.

Erosion by water changes the shape of coastlines. Waves constantly crash against shores. They pound rocks into pebbles and reduce pebbles to sand. Water sometimes takes sand away from beaches. This moves the coastline farther inland.

The Cape Hatteras Lighthouse was built in 1870, on the Outer Banks, a series of islands off the coast of North Carolina. At the time, the lighthouse was nearly 3,300 feet from the ocean. Over time, however, the ocean eroded most of the beach near the lighthouse. By 1999, people worried it would collapse during a strong storm. The lighthouse was moved 2,900 feet inland.

The battering of ocean waves also erodes seaside cliffs. It sometimes bores holes that form caves.

Erosion By Wind

Wind also erodes land. It carries dust, sand, and volcanic ash from one place to another. Wind can sometimes blow sand to create towering dunes. Some sand dunes in the Badain Jaran area of the Gobi Desert in China reach more than 400 meters (1,300 feet) high.

Wind is responsible for the dramatic arches that give Arches National Park, in Utah, its name. Wind can also erode rock until nothing remains at all.

Erosion By Ice

Ice can erode the land. Glaciers move slowly downhill and across the land. As they move, they pick up everything in their path, from tiny grains of sand to huge boulders.

The rocks carried by a glacier rub against the ground below, eroding both the ground and the rocks. Moving glaciers gouge out basins and form steep-sided mountain valleys.

During several times in Earth's history, vast glaciers covered parts of the Northern Hemisphere. These glacial periods are known as ice ages. Glaciers carved much of the northern North American and European landscape. They scoured the ground to form the bottom of what are now the Finger Lakes in the U.S. state of New York. They also carved fjords, deep inlets along the coast of Scandinavia.

Erosion And People

Erosion is a natural process, but human activity can make it happen more quickly. Trees and plants hold soil in place. When people cut down forests or plow up grasses, the soil washes away or blows away more easily. Landslides become more common. Water also rushes over exposed soil rather than soaking into it, causing flooding.

Erosion control is the process of reducing erosion. Sometimes, engineers simply install structures to physically prevent rocks or soil from being eroded away.

Erosion control can also be done by changing the landscape. Living shorelines, for example, are a form of erosion control for wetland areas. They are constructed by placing native plants, stone, sand, and even living organisms such as oysters along wetland coasts. These plants help anchor the soil to the area, preventing erosion.

Global warming is speeding erosion. The change in climate has been linked to more frequent and more severe storms. Storm surges after hurricanes and typhoons can erode miles of coastline.

The rise in temperature is also quickly melting glaciers. This causes the sea level to rise and erodes beaches more quickly. In the Chesapeake Bay area, it is estimated that a rise in sea level of 3 to 4 inches will cause enough erosion to threaten buildings, sewer systems, roads and tunnels.

Zhangjiajie National Forest Park:

Partnerships and Partitions-PART 1

Benchmark Standard	**Geography 4b**: Students will explain how conflict and cooperation among people contribute to the division of the Earth's surface into distinctive cultural and political territories.
Grade Band	6-8
Vocabulary / Key Concepts	**Border**: An imaginary line separating one political division, such as a country, state, province or county, from another **Country**: A recognized territory whose government is the highest legal authority over the land and the people living within its boundaries **Region:** An area with one or more common characteristics or features, which give it a measure of homogeneity and make it different from surrounding areas

~This is from the DRC Unit *Partnerships and Partitions* – modified by CSD for use at home~

ACTIVITY 1:

Think of a time when you crossed a political boundary or border like from state to state or country to country and answer the following questions on a separate sheet of paper:

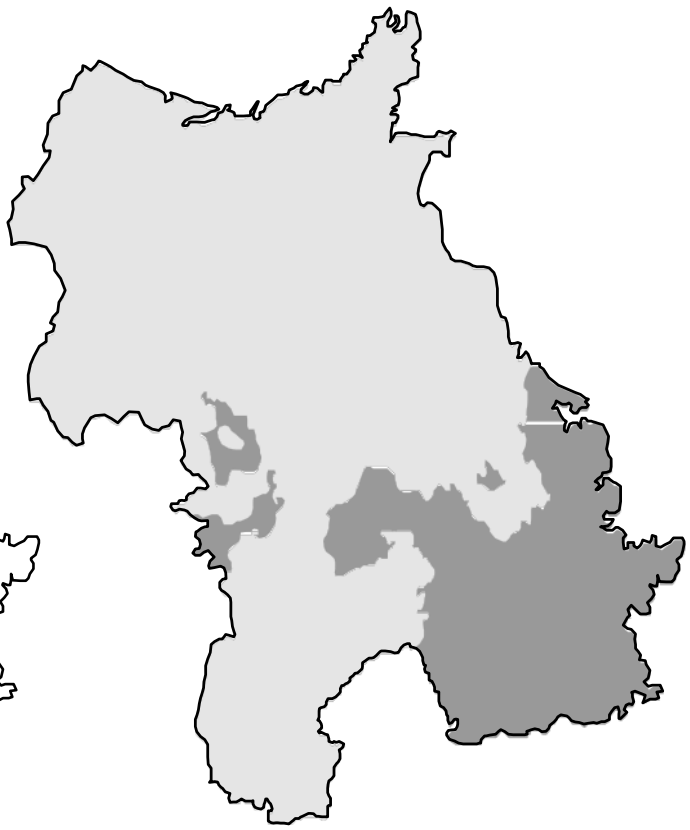
1. How did you know where the border was?
2. Would the border be visible from outer space?
3. What do the words "border" and "political boundary" mean to you?
4. Why do people define regions or countries in any given area?

Think about borders in your community or state and answer the following questions on a separate sheet of paper:

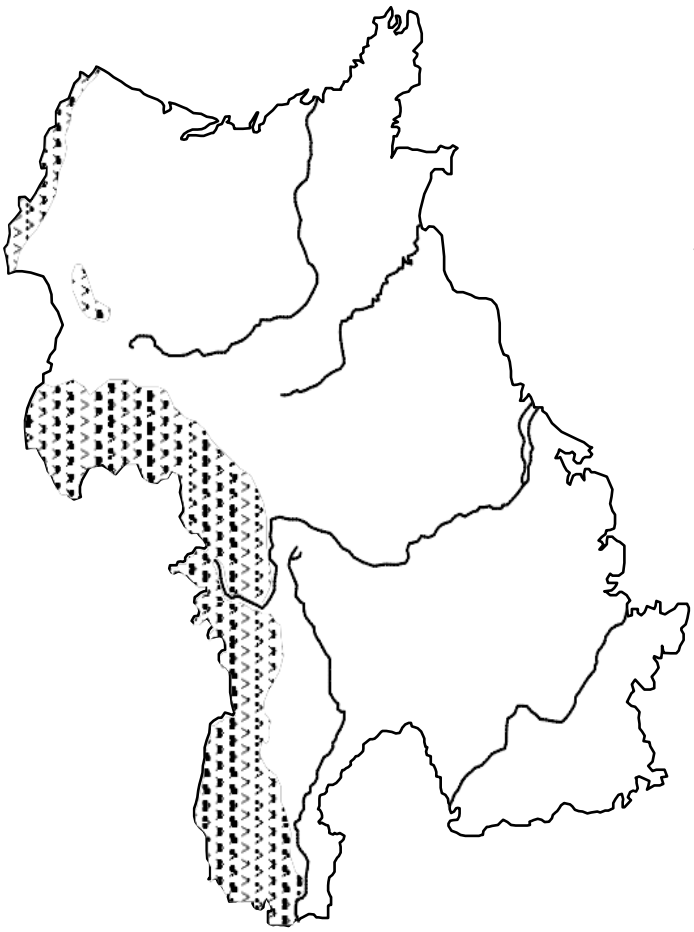
1. How were the borders defined?
2. Do they follow a physical feature in the landscape?
3. Do they follow cultural differences between people on either side of the border?

ACTIVITY 2: Define regions in an area of land. You are to draw country borders in the area below on the "Outline Map", based on how you think the land should be divided. Draw political borders on the blank outline map of this landmass. Take into account the religions, physical features (mountains and rivers), and languages shown on the other maps. After borders are drawn answer the "Questions to Ponder."

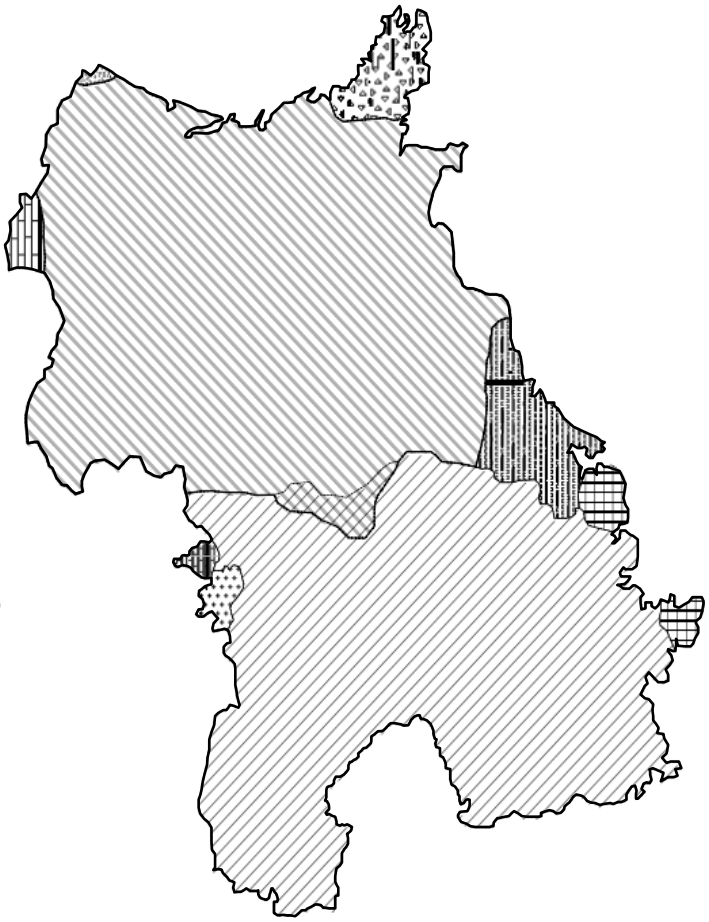
Outline Map



Religions Map



Mountains and Rivers Map



Languages Map

Questions to Ponder – answer the following questions on a separate sheet of paper:

1. Do you think physical features such as rivers are more important than cultural ones, such as language, in setting borders? Why or why not?
2. What would happen if you split this physical feature between two countries? Would people in the countries be able to share the land and/or resources or would they constantly fight over its use?
3. What would happen if a country has a mix of different cultural features (language, religion, etc.)?
4. Will this impact how the people can live and work together in that country?

ACTIVITY 3:

Check for Understanding – answer the following questions on a separate sheet of paper:

1. Physical features like rivers and mountain ranges are often used to form boundaries. Name at least one advantage and one disadvantage of using physical features as international boundaries.
2. Reasons for Regions: Why did you draw the borders where you did?

ACTIVITY 4:

Thought Questions – answer the following questions on a separate sheet of paper:

1. What information was not provided that would have made their job easier? (For example, are there coastlines? How big is the total area? How many people live here? What is the climate? Where are the closest markets?)
2. How might this information have impacted the regions and borders they set? (For example, if you divided the area evenly, how would this affect cultural groups, etc.?)
3. What other things might shape a country's borders (besides the physical and cultural features you already looked at in this lesson).

ACTIVITY 5:

Check for Understanding:

1. Why are borders located where they are? Explain and support your answer with at least 2 geographic examples.