

If The World Were A Village - David J. Smith

Topic: Grade 5/6 7 interdisciplinary **Math/literacy**- connecting knowledge of percentages, decimals and fractions to everyday life. Using the book “*If the World were a Village*” as modelled/shared reading- students will be able to see how math (percentages, decimals, fractions) can be used to help us better understand the world around us. Using “world-mindedness” (knowledge of the world) as the vehicle for acquiring data, students will use world statistics on nationalities, languages, ages, religions, food, air and water, schooling and literacy, money and possessions, and electricity to understand percentages, fractions and decimals if the world were a village of 100 people.

Introduction: Taking a look at the website <http://www.worldometers.info/> students will be introduced to large numbers regarding the current world population. (record the number of births when we start the lesson and then go back and look at it at the end of the lesson and see how it changes). Noting that these statistics are very large numbers and very hard to work with, show video <http://hubpages.com/hub/-If-This-World-Were-a-Village-of-100-people> . Introduce students to the book “If the World Were a Village” explaining that this book has been created for children by taking a look at some world statistics as if the human population fit into a small village of only 100 people.

- Read the story to the class- model the reading.

Have a group discussion about the story: *How can breaking the population down into 100 people help us better understand the information?* Assign students to one of the following 9 groups: Nationalities, Languages, Ages, Religions, Food, Air and Water, Schooling and Literacy, Money and Possessions, Electricity.

- Have students use the data on each of the pages to create a 10X10 graph displaying the statistics on their category.
- Tell students to present their data in decimals, percentages, and fractions
- Once students have independently finished their work students will be making connections between this data and global-mindedness. Answer the question: How does this data help us? How can we use this data to better understand the global population? How has putting the world population into a village of 100 allowed me to gain a greater understanding of my category?
- Students can get into a group with the person who is also working on their topic and they can compare their answers. They can use their ideas to work together to come up with how this data can help them.
- If there is STILL time- we can look at the last two pages of the book “The world in the past” and “The world in the future”....this will begin a class discussion on the growing population and how it can be related to percentages. (ex: the world population is estimated to be 200% bigger in 2050 than it is today)

Extensions: There are MANY extensions for this lesson, so it can take as little to one hour or as much as a month. To introduce this lesson with a BANG I use the “food” statistics from “If the World Were a Village.” It says that each night: **60** people are always hungry, **16** other people sometimes go to bed

hungry and 24 people always have enough to eat. Choose three colours of paper and cut them into squares. Give your students a square to represent what group they are from. (I had 10 students to it was easy. I gave 6 kids a pink paper, 2 kids a blue paper, and the green paper to two kids) They were excited because they wondered what it meant. Then, I took out some brownies. I explained to them that everyone in the world does not have the same opportunities and that our classroom is going to become a reflection of what life is like for many people. First I called on the green students, I called them the “have” group- they each got a huge chunk of brownie. Then I called the blue group, and I gave each kid a small piece of brownie. The final group was the pink group (the biggest one) who got NOTHING. This provided shock value for the kids because it was pretty obvious to them that more of half the people in the world do not get enough food to eat.

Languages

1. Use the hundredths chart to fill in the percentages of each world language. (Use legend)
2. Express each world language as a percent, a decimal, and a fraction (in lowest terms)

	Percent	Decimal	Fraction
Chinese			
English			
Hindi			
Spanish			
Arabic			
Bengali			
Portuguese			
Russian			

1. If the amount of people who speak Spanish were to increase by 300%, how many people in the village would speak Spanish

Nationalities

1. Use the hundredths chart to fill in the percentages of each world nationality. (Use legend)
2. Express each as a percent, a decimal, and a fraction (in lowest terms)

	Percent	Decimal	fraction
Asia			
Africa			
Europe			
South America and Central America			
Canada and USA			
Oceania			

1. If the amount of people who are from Canada and America were to increase by 300%, how many people in the village would be from that region?

Ages

1. Use the hundredths chart to fill in the percentages of each world age category. (Use legend)
2. Express each world language as a percent, a decimal, and a fraction (in lowest terms)

	Percent	Decimal	fraction
Under 5			
Between 3-9			
Between 10 and 19			
Between 20 and 39			
Between 40 and 49			
Between 50 and 59			
Between 60 and 69			
Between 70 and 79			
Over 79			

1. If the amount of people who are between 10 and 19 were to increase by 300%, how many people in the village would be between the ages ten and nineteen?

Religions

1. Use the hundredths chart to fill in the percentages of each world Religion. (Use legend)
2. Express each world language as a percent, a decimal, and a fraction (in lowest terms)

	Percent	Decimal	fraction
Christians			
Muslims			
Hindus			
Shamanism, animism, or folk religions			
Buddhism			
Other global religions			
Jewish			
Non-religious			

1. If the amount of people who practice Buddhism were to increase by 300%, how many people in the village would be Buddhist?

Food

1. Use the hundredths chart to fill in the percentages of each world Food. (Use legend)
2. Express each world language as a percent, a decimal, and a fraction (in lowest terms)

	Percent	Decimal	fraction
Always hungry			
Sometimes Hungry			
Never Hungry			

1. If the amount of people who were always hungry were to decrease by 300%, how many people in the village would always be hungry?

Air and Water

1. Use the hundredths charts to fill in the percentages of each world water and air quality. (Use legend)
2. Express each world language as a percent, a decimal, and a fraction (in lowest terms)

	Percent	Decimal	fraction
Have water			
Do not have water			
Graph 2			
Breath clean air			
Breathe unhealthy air			

1. If the amount of people who breathe unhealthy air were to decrease by 400%, how many people in the village would breathe unhealthy air?

Schooling and Literacy

1. Use the hundredths charts to fill in the percentages of each world education statistic. (Use legend)
2. Express each world language as a percent, a decimal, and a fraction (in lowest terms)

	Percent	Decimal	fraction
School age villagers			
School age villagers attend school			
teachers			
Graph 2			
Literate villagers			
Illiterate villagers			

1. If the amount of people in the village who attend school were to increase by 200%, how many people in the village would attend school?

Money and Possessions

1. Use the hundredths charts to fill in the percentages of each world money and possession statistics. (Use legend)
2. Express each world language as a percent, a decimal, and a fraction (in lowest terms)

	Percent	Decimal	fraction
Richest villagers			
Poorest villagers			
Moderate villagers			

1. If the amount of people in the village who live on less than \$1 per day were to decrease by 200%, how many people in the village would live on less than \$1 per day?

Electricity

1. Use the hundredths charts to fill in the percentages of each world money and possession statistics. (Use legend)
2. Express each world language as a percent, a decimal, and a fraction (in lowest terms)

	Percent	Decimal	fraction
Have electricity			
Do not have electricity			
Graph 2			
Radios			
Televisions			
Telephones			
computers			

3. If the amount of people in the village who do not have electricity were to decrease by 200%, how many people in the village would not have electricity?

Making Connections

Earth is a crowded place, and its getting more crowded all the time. As for January 2002 the worlds population was 6 billion, 200 million- that's 6 200 000 000 people. Numbers are big and hard to understand, but what if we imagined the world as a village of just 100 people? In our imaginary village, each person would represent 62 million people (62 000 000) from the real world.

One hundred people would fit nicely into a small village. By learning about the villagers- who they are and how they live- perhaps we can find out more about our neighbours in the real world and the problems our planet may face in the future.

After analyzing various statistics from the global village, including: Languages, Nationalities, Age, religions, food, air and water, school and literacy, money and possessions and electricity, we have gained a greater understanding of the current world population. Use your assigned category to answer the following questions:

1. Looking at your data, draw 3 conclusions based on what the statistics tell us about the current world population.
2. How can we use this data be used to make a positive change for the future?
3. What does this data tell us about life in Canada compared to the rest of the world? What did you find most surprising about your category? How does using percentages, decimals and fractions help us better understand world population?