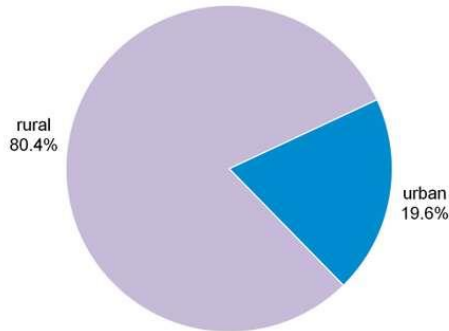# Data Analysis:
Looking at History

The ability to analyze data and draw conclusions is an important skill for many disciplines such as History, Math, English, and Science. Let's stretch your brain with some data analysis!

EXERCISE 1: The two graphs below compare the number of people living in the rural US versus rural South Sudan. Study the graphs and then answer the following questions below.
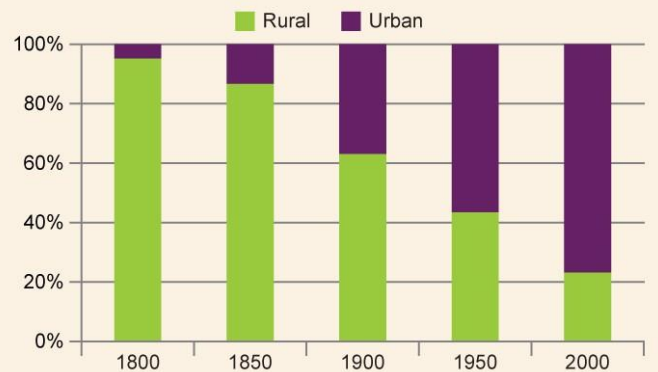

South Sudan urban-rural (2018)

rural 80.4%

urban 19.6%

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Graph from Collins, R., & Sabr, M. (2019, June 07). Religion. Retrieved July 02, 2020, from https://www.britannica.com/place/South-Sudan/Religion
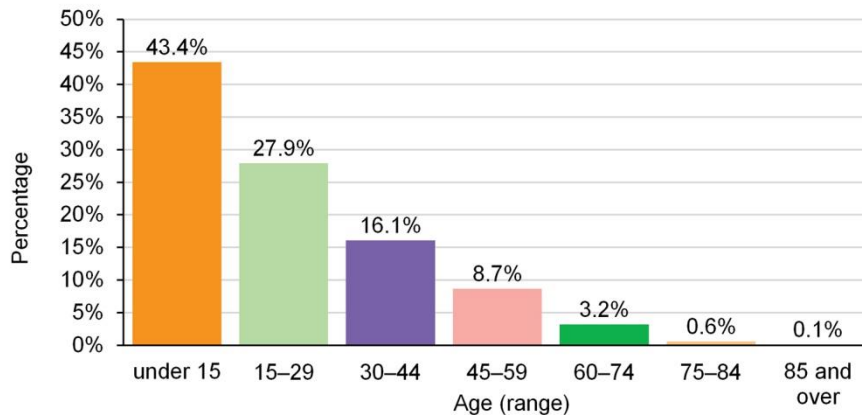

Percent of U.S. Population
Rural ■ Urban

Graph from Bill Pelz, H. (n.d.). Introductory Sociology. Retrieved July 02, 2020, from https://courses.lumenlearning.com/atd-herkimer-introsociology/chapter/reading-urbanization/

1. In what year did the U.S. population distribution most closely resemble that of South Sudan in 2018?

   _____

   a. What major event in U.S history occurred near that date? ___ _____
   b. How does this time period in U.S. history relate to what is occurring in the book in South Sudan?

2. Many population scientists use the percentage of urban versus rural population statistics as a way to gauge the progress of a country. If a substantial part of the population lives in urban areas (or cities), then the country is considered more advanced. This is because urban areas need to have water and sanitation plans, as well as infrastructure in place and working for a large number of people to live there. If we consider urban versus rural living an indicator of progress in a country, how many years behind the U.S. was South Sudan in 2018 than the U.S.?

EXERCISE 2: The graphs below show the age breakdowns for the South Sudan in 2018 and the United States in 1870 and 2010. After studying the graphs, answer the questions that follow.
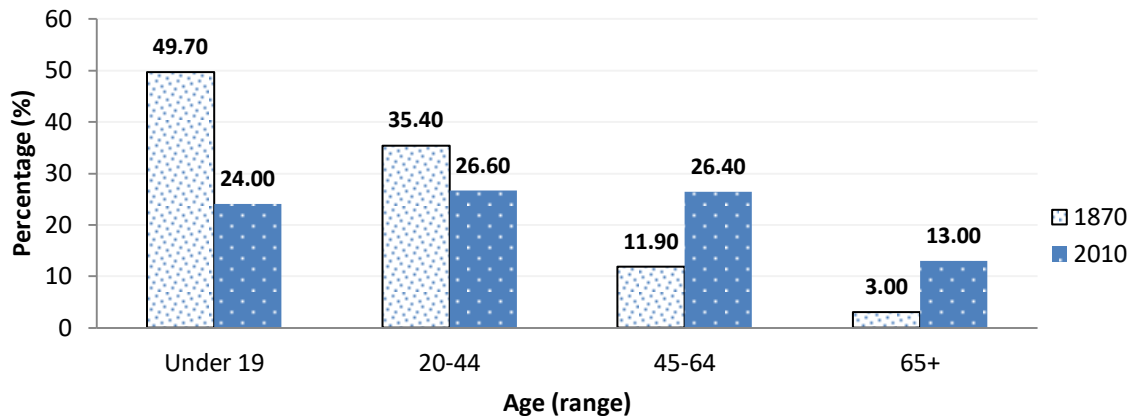
South Sudan age breakdown (2017)

Graph from Collins, R., & Sabr, M. (2019, June 07). Religion. Retrieved July 02, 2020, from https://www.britannica.com/place/South-Sudan/Religion

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United States Age Breakdown 1870 versus 2010

Background Information: The South Sudan in 2017 was still embroiled in fighting, even though the Civil War discussed in the book "A Long Walk to Water" officially ended in 2005. Based on information in the book, we can assume that Salva is around the age of 10 in 1985, which is why the rebels do not take him and force him into their army. The Civil War in the United States lasted from 1861 to 1865 and was the last major war to occur on U.S. soil. Keep this in mind when you answer the following questions.

1. Which age group composes the greatest percentage of the population in 2017 South Sudan?

2. Which age group composes the greatest percentage of the population in 1870 United States?

3. What is the total percentage of the remaining population in 2017 South Sudan?

4. What is the total percentage of the remaining population in 1870 United States?

5. Why do you think the numbers are so similar for answers 1 and 2? Why do you think the numbers are so similar for answers 3 and 4? Write a short paragraph describing what you feel may be causing the similarity in numbers. (Hint: think about the history of the 2 countries during those time periods and what was going on.)

6. Compare the population age numbers for the United States in 2010 to those of the U.S. in 1870 and those of South Sudan in 2018.

    a. Which of the following statements is true based on the U.S. population data for 2010?
       a.) The population of children 19 and under is higher.
       b.) The population of adults over the age of 65 is lower.
       c.) The population of people from 0 to age 64 has stabilized.

    b. What can you infer about the U.S. in 2010 based on your answer above? (Hint: take into account the history of war for the South Sudan and the United States prior to 1870.)

EXTENDED THINKING: Imagine that you lived during the mid-1800's in the United States. Fill in the chart to compare and contrast the way you live today with how a typical rural family may have lived back then.

Life Activities	U.S. in the mid 1800's	U.S. today
Fresh water access	Water obtained mostly by shallow wells or by springs, lakes, or rivers near the property.	
Home lighting	No electricity. Most homes used candles or oil lamps to light their homes.	
Basic sanitation	Any indoor plumbing for bodily waste was limited to the exceptionally wealthy. Most of the population used bedpans and outhouses.	
Bathing	Due to limited water access, daily bathing was not commonplace, even for the very wealthy.	
Education	One room school houses were attended by students of all ages and sexes. Colleges did exist for extended learning, but were not as commonplace as today.	

3. COMPARE AND CONTRAST: Compare the chart above with how Nya is living based on the book. Write a short essay that compares her life in the early 2000's, to life the in the U.S. in the mid 1800's, and your life today. Make sure to focus on the five "Life Activities" listed in the chart above. What similarities do you see between how she is living, compared to life in the mid-1800's in the U.S.? What, if any, differences do you notice? How does her life up until 2009 compare to the way you live today?

Your essay should include the following components:
a. Opening paragraph
b. 1 paragraph that compares and contrasts each of the 5 "Life Activities" with Nya's life in the early 2000's, to life in the U.S. in the mid 1800's, and your life today. (Total of 5 paragraphs for this section).
c. Closing paragraph that summarizes your analysis.

RESOURCES USED FOR WORKSHEET:

Bill Pelz, H. (n.d.). Introductory Sociology. Retrieved July 02, 2020, from
https://courses.lumenlearning.com/atd-herkimer-introsociology/chapter/reading-urbanization/

Collins, R., & Sabr, M. (2019, June 07). Religion. Retrieved July 02, 2020, from
https://www.britannica.com/place/South-Sudan/Religion

Population Distribution by Age, Race, and Nativity, 1860–2010. (n.d.). Retrieved July 10, 2020, from
https://www.infoplease.com/us/population/population-distribution-age-race-and-nativity-1860-2010