

WORLD DATA ANALYST ACTIVITY

COUNTRY COMPARISONS

TEACHER TIPS



Comparing Countries and Interpreting Statistics

The students will research population statistics such as birth rate, population per physician, and literacy rate for the United States and another country. They will then compare these statistics for the two countries, graph the results, and analyze what the charts reveal about life in each of the countries.

Learning Objectives

- Develop graphing skills
- Develop ability to interpret graphs
- Develop critical thinking skills
- Develop knowledge of geography
- Develop technology application skills

Defining Population Statistic Terms

Before students begin their research, write the following terms on the board and discuss their meanings. You may access the *World Data Analyst* glossary on the “Country Snapshot” page. The students should also know what it means when each of these factors is high or low for a certain country. (*For example, what does it mean for a country to have a low literacy rate?*)

Here are possible definitions and worldwide averages, for your reference:

Population density: Population per unit of land area; i.e., persons per square mile of useful land. As of 2002, the worldwide average is approximately 118 people per square mile or 46 people per square kilometer.

Birth rate: Number of live births annually per 1,000 people. Birth rates for individual countries may be compared with an estimated world annual average of 22.5 births per 1,000 population, as of 2000.

Population per physician: Number of people for each physician; i.e., the total population divided by the number of physicians in the country. The worldwide average is approximately 730 people for one physician.

Literacy rate: Percent of people age 15 years and above who are able to read and write a language. The worldwide literacy rate is approximately 84% for males and 71% for females.

Gathering Statistics using *World Data Analyst*

World Data Analyst from Encyclopædia Britannica is an online resource that offers statistical portraits of the countries of the world and tools for making comparative charts and graphs. You may access the resource through an Internet browser at www.world.eb.com. The Home Page provides an overview of the site and access to the features of *World Data Analyst*. You will be working in the “Country Comparisons” section to compare the United States with another country.

Choose the Country

What country you are going to compare to the United States? The students may choose a country depending upon current events or areas of current study. For example, if you are currently studying Europe, the students may choose a country in Europe, such as France or Italy. If you would like to have the students choose a European country based on ranking (high or low), you can demonstrate how to use the “Ranked Statistics” area on *World Data Analyst*.

Create Data Chart

While online at the World Data Analyst Home Page, click on the “Current Comparisons” button located in the upper blue navigation bar or in the “Country Comparisons – Current Comparisons” section. The students should follow the instructions on how to create a data table. There is also an option to automatically create a data chart, however, students will draw the charts in the activity instead of viewing them online. Depending upon the students’ current knowledge of charts and when to use one, you may want to discuss the use of charts in greater detail prior to completing this activity.

Chart Statistics

Discuss how to create and read column charts. Use the following Column Charts; chart each statistic for the two countries on a separate chart.

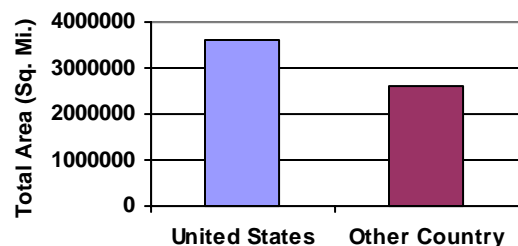
Use **BLUE** for drawing the United States column.

Use **RED** for drawing the other country column.

Insert the other country’s name below the right column on each chart.

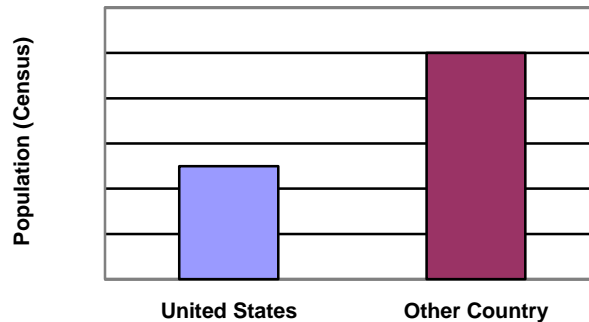
EXAMPLE OF COLUMN CHART:

Use as reference



Current Comparisons Charts

Chart #1 Country Population



Analyze this statistic chart. What can you infer about life in each of the countries? Student answers will vary for the column charts activities. You may direct the students on how to answer this section if you are looking for a particular inference.

To check students' charts, teachers may also use World Data Analyst to automatically create charts. Follow the same instructions as creating a table, but then click the button that says, "Create a Chart".

Additional Research

Complete some research about the countries and answer the following questions. In order to research your countries; while in *World Data Analyst*, "Current Comparisons" view, click on the country name. You will be taken to the *Britannica Concise Encyclopedia* article. Again, some answers will vary; others within the U.S. information section should be similar.

Draw Conclusions using Statistics, Facts, and Inferences

Finally, review the data charts and the additional research materials. Answer the question shown below. Your paragraph will include educated guesses, speculation, and facts. Support your explanation with specific examples, comparisons to the United States, and numbers. (For example, look at *Density, person per square mile chart* – is the number for the second country greater or less than the United States number? Do you think the second country is more crowded than the United States? What would that mean for people living there?)

Based on your research and other information, what do you think life would be like in the other country? Again, answers will vary.