

# Comparing Areas and Populations

1. Find a country about the same size as one state (or group of states) in the U.S.
2. Use Wikipedia or the CIA Factbook to find the area and population of the country.

## Population, 2010 Census

Thousand people

California	37254
Texas	25146
New York	19378
Florida	18801
Illinois	12831
Pennsylvania	12702
Ohio	11537
Michigan	9884
Georgia	9688
North Carolina	9535
New Jersey	8792
Virginia	8001
Washington	6725
Massachusetts	6548
Indiana	6484
Arizona	6392
Tennessee	6346
Missouri	5989
Maryland	5774
Wisconsin	5687
Minnesota	5304
Colorado	5029
Alabama	4780
South Carolina	4625
Louisiana	4533
Kentucky	4339
Oregon	3831
Oklahoma	3751
Connecticut	3574
Iowa	3046
Mississippi	2967
Arkansas	2916
Kansas	2853
Utah	2764
Nevada	2701
New Mexico	2059
West Virginia	1853
Nebraska	1826
Idaho	1568
Hawaii	1360
Maine	1328
New Hampshire	1316
Rhode Island	1053
Montana	989
Delaware	898
South Dakota	814
Alaska	710
North Dakota	673
Vermont	626
Wyoming	563

## Land Area

Thousand square miles

Alaska	570
Texas	262
California	156
Montana	146
New Mexico	121
Arizona	114
Nevada	110
Colorado	104
Wyoming	97
Oregon	96
Idaho	83
Utah	82
Kansas	82
Minnesota	80
Nebraska	77
South Dakota	76
North Dakota	69
Missouri	69
Oklahoma	69
Washington	67
Georgia	58
Michigan	57
Iowa	56
Illinois	56
Wisconsin	54
Florida	54
Arkansas	52
Alabama	51
North Carolina	49
New York	47
Mississippi	47
Pennsylvania	45
Louisiana	44
Tennessee	41
Ohio	41
Kentucky	40
Virginia	40
Indiana	36
Maine	31
South Carolina	30
West Virginia	24
Maryland	10
Vermont	9
New Hampshire	9
Massachusetts	8
New Jersey	7
Hawaii	6
Connecticut	5
Delaware	2
Rhode Island	1

3. Fill in the blanks in this sentence:

\_\_\_\_\_ is about the same size as \_\_\_\_\_ but has \_\_\_\_\_ as many people.  
COUNTRY STATE NUMBER

4. Design a poster, presentation screen, or web page to illustrate your results.

## Comparing Areas and Populations – Data Sheet

1. Choose a country from the list below

	<b>Area</b> (thousand square miles)	<b>Population</b> (millions)
Afghanistan	250	31
Bangladesh	57	156
Costa Rica	20	4.5
Cuba	42	11
Egypt	387	89
France	213	64
Germany	138	81
Greece	51	11
Italy	116	61
Japan	145	127
Kenya	224	45
Korea (N)	47	25
Korea (S)	39	51
Mongolia	604	3
Myanmar (Burma)	261	51
Netherlands	16	17
Nigeria	357	182
Pakistan	310	210
Poland	121	38
Portugal	36	10.5
Spain	195	46
Sri Lanka	25	20
Syria	71	18
United Kingdom	93	64
Vietnam	125	91

2. Find one state (or group of states) in the U.S. that has about the same area.

3. Fill in the blanks in this sentence:

\_\_\_\_\_ is about the same size as \_\_\_\_\_ but has \_\_\_\_\_ as many people.

4. Design a poster, presentation screen, or web page to illustrate the results of your research.

5. Look at the posters or presentation screens made by your classmates.

6. Write a generalization to summarize the information.

## Comparing Areas and Populations

**1.** Find a country that has about the same area as one state (or group of states) in the U.S. Use Wikipedia or the CIA Factbook to find the actual area and population of the country. Compare that information with the table of areas and populations for the states.

**2.** Fill in the blanks in this sentence:

\_\_\_\_\_ is about the same size as \_\_\_\_\_ but has \_\_\_\_\_ as many people.

Here are some examples:

Afghanistan	a little smaller than Texas	20 percent more people
Bangladesh	as big as Michigan	nearly 16 times as many people
Belgium	a little larger than Maryland	more than twice as many people
Bulgaria	a little smaller than Louisiana	nearly twice as many people
Burma	as big as Texas	twice as many people
Chile	twice as big as Montana	20 times as many people
Costa Rica	a little smaller than West Virginia	2-1/2 times as many people
Cuba	slightly larger than Tennessee	nearly twice as many people
Denmark	half as big as Maine	four times as many people
Ecuador	a little bigger than Colorado	three times as many people
Egypt	four times as big as Oregon	22 times as many people
France	a little smaller than Texas	2-1/2 times as many people
Germany	a bit bigger than New Mexico	40 times as many people
Greece	about as big as Alabama	more than twice as many people
Haiti	1/3 as big as South Carolina	more than twice as many people
Ireland	about as big as Maine	5 times as many people
Israel	about as big as Massachusetts	1-1/3 times as many people
Italy	about as big as Arizona	nine times as many people
Jamaica	twice as big as Delaware	nearly four times as many people
Japan	a little smaller than California	3-1/2 times as many people
Kenya	almost as big as Texas	twice as many people
Korea (N)	about as big as Mississippi	8 times as many people
Korea (S)	almost as big as Kentucky	12 times as many people
Lebanon	twice as big as Delaware	5 times as many people
Liberia	about as big as Louisiana	about as many people
Libya	six times as big as Arizona	about the same number of people
Malawi	about as big as Pennsylvania	1-1/3 times as many people
Mongolia	a bit bigger than Alaska	four times as many people
Netherlands	one-third the size of New York	almost as many people
New Zealand	about as big as Colorado	about as many people
Nigeria	2.2 times as big as California	five times as many people
Pakistan	twice as big as California	five times as many people
Poland	about as big as New Mexico	18 times as many people
Portugal	about as big as Indiana	nearly twice as many people
Rwanda	about as big as Maryland	2-1/2 times as many people
Spain	twice as big as Oregon	12 times as many people
Sri Lanka	about the size of West Virginia	11 times as many people
Syria	about as big as South Dakota	20 times as many people
Uruguay	about as big as North Dakota	five times as many people
Vietnam	less than twice as big as Missouri	15 times as many people

**3.** Design a poster, presentation screen, or web page to illustrate the results of your research.

**4.** On a separate piece of paper, write a generalization about the information on this table.

Teacher's Guide: **X-Country has about the same area as Y-state, BUT . . .**

Overview: students consult the CIA Factbook or Wikipedia to find the area and population of a selected country.

Then they compare that country with a state (or group of states) that has about the same number of square miles. Finally, they design a poster to display a simple comparison: X-country is about as big as Y-state, but it has Z times as many people.

Grade: 5-8

Related Discipline: Math

CC Standard: math, writing

Time: home + 1 period

**Preparation:** Make copies of the State data table and (if desired) the activity template.

**Setup:** “The world has a lot of countries. We don’t just want to learn facts about every one of them.

In fact, we can’t learn facts about every one of them. Our brains just won’t hold that much trivia.

What we can do is learn how to find key facts when we need them, and how to make a fair comparison to put those facts into perspective. In the process, we will make an important generalization, one that politicians and diplomats should know before they decide how to deal with other countries.”

**Procedure:** The activity has three parts:

1. **Use the CIA Factbook** (<https://www.cia.gov/library/publications/the-world-factbook/index.html>) to gather information about one country. Then compare that country with a state (or group of states) that has roughly the same number of square miles. It might help to start by noting the number of square miles in your own state. Some teachers also ask a few general questions about the influence of population density – like “what can you do in a rural area that is impossible in a crowded city?” “What can you do in a big city that you can’t do in a rural area?”
2. **Design a poster to compare the country and state:** “\_\_ Country is about the same size as \_\_ State but has \_\_ times as many people.” The poster should include a world map that shows the general locations of the country and the state. It could also have a circle or bar graph to represent the populations, or small maps (one dot equals \_\_ million people”). Verbal instructions for this step can be prescriptive or open-ended, depending on what math objective you also want to address.
3. **Examine other students’ posters and write a generalization about what you observe.** (Or, study the data table shown on the screen.) The generalization is obvious – most countries have many more people per square mile than similar parts of the United States. Notable exceptions are some large countries with really severe environmental issues – cold in countries like Canada, Russia, and Finland; dry countries like Australia, Argentina, Mali, and Namibia; mountains in countries like Tibet and Bolivia, and so forth. The generalization, however, is still true – when you compare areas with roughly similar environments, the United States almost always has a much smaller population. The most obvious comparison is with China (see the Big Idea Presentation about Population in China). China is roughly the same size as the United States and occupies roughly the same range of latitude. It has no West Coast, nothing like California, and does not have any Great Lakes to moderate the climate in the interior. As a result, China has only half as much good farmland as the United States, BUT it has four times as many people.

**Debrief:** When we talk about a range of issues, from family income and job opportunities to human rights and terrorism, it is important to remember that the number of people per square mile of good land is not the same everywhere. “How many mouths you have to feed” is an important fact!

**Vocabulary:** area population density crowding dot map bar graph comparison

**Extension:** Have students “adopt” individual countries and use the CIA Factbook to make a profile, as if they were briefing a business executive or politician about that area. The briefing should describe the local environment and how people live in that part of the world.

Clickable pdfs about Deserts, Cropland, and Demographic Variables in the World folder have a large number of map layers that can be used to prompt discussions or individual projects. These pdf files allow you to turn individual layers of information on or off, to reveal patterns that might not be obvious on a typical atlas map, which tries to show as much information as possible on a page.