

**Goal:** To compare area and population of various regions.

There are some people who like to live in isolated territories. For example, the town of Whittier, Alaska has a population of only 208 people with a land area of 12.274 square miles (7,855.4 acres). This gives Whittier, Alaska a population density of 16.95 people/square mile. That means that each person can live on 37.8 acres all alone.

**Instructions:** Recreate the following tables in Google Sheets. Then research the data from the various regions. Use Wolfram Alpha (<http://www.wolframalpha.com>) to find the data. For example, type in “land area of Boylston, MA”. Then, replace “land area” with “population” to find the second datum. Use formulas to auto calculate the last two columns. Choose five other regions and complete the table with them. These regions can be cities, states, countries, etc.

In a separate Google Doc, answer the following questions:

1. What is something that you expected from the data?
2. What is something that surprised you?
3. Where would you prefer to settle down? Why?
4. What can you conclude about the population of the planet?
5. Why did you choose the regions that you did?
6. Other observations of the data

Finally, you will create a poster (physical or digital) that compares two of the regions from your table. The poster should be simple and include accurate information including an image, a density box (use the same scale for each) and other data. This must be submitted as a digital attachment.

**What to submit:**

- Sheet with data
- Doc with reflection
- Digital representation of infographic

**Rubric**

A: Exceptional	Proficient Plus: Excellent use of shading. Insert pictures into sheet to spice it up.
B: Proficient	Data is accurate. Organization is clean. Spreadsheet auto calculates. Reflections are thought out and accurate. Poster is clean and accurate.
C: Basic	Some missing data. Not full auto calculation. Poster lacks information, is disorganized or unclear. Reflection is basic.
D: Developing	Significant portions are missing from spreadsheet.
F: Inadequate	Incomplete by missing most information.

**Applied Math**  
**Population and Area**

Population Data

Region	Land Area (sq mi )	Current Population	Density (people/sq mi)	Area per person (acres)
Massachusetts			<formula>	<formula>
Japan				
New York City				
California				
Los Angeles				
choice 1				
choice 2				
choice 3				
choice 4				
choice 5				
The World in Texas		<insert world population>		