

## The 7 Billionth Baby

Yep, the population of the world is about to reach **7 billion**. Can you write 7 Billion as a number? If you are not sure, try writing 7 thousand, then 7 million before writing 7 billion.

1. Hot dogs come in packages of 10. How many hot dog packages would I have to buy before I had 7 billion hot dogs?
2. How many hundred-dollar bills would I need to have \$7 billion dollars? Show your work.
3. There are about 312,445,821 people in the U. S. About how many times larger is the population of the world than the U.S.?
4. Find out the approximate population of either your town or your state. When the world reaches a population of 7 billion how many times greater will the population of the world will be than your town or state?

The table below shows the estimated year when each billion people milestone was reached.

5. Create a column to the right of the table that shows the number of years that it took the world population to increase by 1 billion. The first entry, of course, would only be an increase by  $\frac{1}{2}$  billion.

6. Describe a pattern or trend that you see.

Population	
Year	Billion
1500	.5
1804	1
1927	2
1960	3
1974	4
1987	5
1999	6
2011*	7
United Nations Fund data *estimate Oct 30, 2011	

During the year 2011 according to estimates:

- 135 million people will be born
- 57 million people will die and
- 78 million people will increase the world population.

7. Create a math sentence with operations that shows how the numbers 135 million, 57 million, and 78 million are related to one another.

On the next page is a chart of the population of the 10 countries with the greatest population packed into relatively small land area.

Countries ranking in the top both in terms of **total population** (more than 15 million people) and **population density** (more than 250 people per square kilometer) as calculated in 2010.

Country	Population	Area (km <sup>2</sup> )	Density (Pop per km <sup>2</sup> )	Notes
India	1,189,172,906	3,287,240	$\frac{1,189,172,906 \text{ people}}{3,287,240 \text{ km}^2} \approx 362$	Growing country
Bangladesh	158,570,535	143,998	1,101	Fast growing country
Japan	126,475,664	377,873		Declining in population
Philippines	101,833,938	300,076		Fast growing country
Vietnam	90,549,390	331,689		Growing country
United Kingdom	62,698,362	243,610		Growing country
South Korea	49,354,980	99,538		Steady in population
<i>Republic of China</i>	1,338,100	35,980		Steady in population
Sri Lanka	21,283,913	65,610		Growing country
Netherlands	16,847,007	41,526		Steady in population

8. Fill in the countries density column by using your calculator to divide population by square kilometers of land area. Remember to not show decimal parts of humans.
9. In the news last night, we were told that the 7 billionth baby would probably be born in India. Explain why you think the newscaster said that.
10. If we use the populations listed above (which are somewhat out of date) and the upcoming world population number of 7 billion, calculate the percent of the world's population in each of these most densely populated countries.
11. What total percent of the world lives in these 10 countries?
12. Mr. Marks (the co-author of these assignments) and his wife are about to have a new baby. If there are approximately 490,000 babies born every day worldwide, about what are the odds that his baby will be the 7 billionth person on earth?

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Sources: [http://en.wikipedia.org/wiki/World\\_population\\_estimates](http://en.wikipedia.org/wiki/World_population_estimates)  
[http://en.wikipedia.org/wiki/Population\\_growth](http://en.wikipedia.org/wiki/Population_growth)  
<http://www.infoplease.com/ipa/A0004379.html>