The Metronome as a Population Teaching Tool

BY JOHN TANTON

Those of us concerned with the human population situation are often confronted with the mesmerism of numbers. There is a general human inability to comprehend and relate to numbers that run into the millions and billons. World population is now increasing about 81 million per year. How can this be put into terms that we can grasp more easily?

One way is to break the 81 million per year rate down into smaller units of time that are closer to our ordinary experience. For instance, that number of new people reduces to:

> 221,400 per day
> 9,220 per hour
> 154 per minute

The 154 rate per minute is within range of most metronomes, which run up to about 200 strokes per minute. The metronome I like best is a Wittner MT-50. It has three modes: sound only, flashing light only, and both together. It costs about $30.00.

I sometimes start a metronome running, using both light and sound, at the beginning of a talk and explain the idea of relating population growth to time. Then since the noise is distracting, I shut off the sound and just leave the light flashing during the speech. Then I turn the sound back on at the end of my remarks to remake the point about the rate of increase.

It should be noted that the 81 million per year figure is the net increase. There are actually five births (137 million) for each two people that die (57 million). The 137 million newcomers need the expenditure of many resources to make them into productive citizens. The 57 million who exit the scene in effect take with them most of the resources expended in their development. The old saying that "you can't take it with you," is dramatically wrong. For the most part, we cannot leave behind any useful residual of the resources we used in our lifetimes.

Every day it becomes more imperative that we do all we can to grasp the reality of the constant growth of world population and its effects on the resources of the planet, as well as the nature of our lives together.

If it took you 60 seconds to read this page, approximately 154 people were added to the earth's population in that time!

P.S. If you'd like to try this teaching tool, and your local music store doesn't have a suitable metronome, there are several Websites on the Internet where one can be ordered. If you search "Wittner MT-50," several choices pop up. Or if you prefer, I'd be happy to order one for you. E-mail me at: jtanton@thesocialcontract.com ∎

John H. Tanton, M.D. is publisher of The Social Contract, and served as editor for its first eight years. He is co-author with Wayne Lutton of The Immigration Invasion, and has written numerous editorials and opinion pieces including "End of the Migration Epoch."

World Population Clock – 2005

Measure	World	More developed countries	Less developed countries	Less developed countries (ex. China)
Population:	6,477,451,000	1,211,227,000	5,266,224,000	3,962,523,000
BIRTHS PER:				
Year	137,350,692	13,453,323	123,897,369	107,874,884
Month	11,445,891	1,121,110	10,324,781	8,989,574
Week	2,641,359	258,718	2,382,642	2,074,517
Day	376,303 3	6,858	339,445	295,548
Hour	15,679	1,536	14,144	12,314
Minute	261	26	236	205
Second	4.4	0.4	3.9	3.4
DEATHS PER:				
Year	56,556,474	12,218,416	44,338,058	35,968,297
Month	4,713,040	1,018,201	3,694,838	2,997,358
Week	1,087,625	234,970	852,655	691,698
Day	154,949	33,475	121,474	98,543
Hour	6,456	1,395	5,061	4,106
Minute	108	23	84	68
Second	1.8	0.4	1.4	1.1
NATURAL INCREASE PER:				
Year	80,794,218	1,234,907	79,559,311	71,906,587
Month	6,732,852	102,909	6,629,943	5,992,216
Week	1,553,735	23,748	1,529,987	1,382,819
Day	221,354	3,383	217,971	197,004
Hour	9,223	141	9,082	8,209
Minute	154	2	151	137
Second	2.6	0.04	2.5	2.3
INFANT DEATHS PER:				
Year	7,422,408	87,410	7,334,998	6,899,186
Month	618,534	7,284	611,250	574,932
Week	142,739	1,681	141,058	132,677
Day	20,335	239	20,096	18,902
Hour	847	10	837	788
Minute	14	0.2	14	13
Second	0.2	0.003	0.2	0.2

Source: Population Reference Bureau, 2005 World Population Data Sheet.