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Cover: It is said that the universal law of gravitation was born when cover: it is said that the universal law of gravitation was born whe lsaac Newton, sitting in his garden, saw an apple fall from a tree and realized that the apple's attraction to the earth was the same kind of force that keeps the moon in the earth's orbit. Newton published his law of gravitation and other physical laws on July 5, 1687, in the *Principia*, a monumental treatise that dramatically that the way scientists and the rest of society approached the world. To commemorate Newton and the Principia's 300th anniversary, the British Post Office issued this and other stamps last March. (Illustration: British Post Office)

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Letters

At last count . . .

Who is right? In "World birth rate on the rise" (SN: 5/9/87. p.303) you imply that Carl Haub of the Population Reference Bureau suggests that the world's human population .. is expected to pass 5 billion this year." However, the Population Institute told us that our population passed 5 billion last July.

What is the problem with keeping track of this crucial statistic? Are the data that soft? Who supplies them? Who evaluates them? Is there an authoritative source, such as the Worldwatch Institute or a United Nations agency?

Earl D. Hanson Middletown, Conn.

According to Haub, most of the organizations that keep tabs on world population believe that the 5 billion mark is being passed this year. In fact, the United Nations Population Division which along with the U.S. Census Bureau's International Demographic Data Center and the World Bank is considered to be the most reliable source of population information plans on July 11 to commemorate the passing of the 5 billion level.

Nonetheless, Haub says that "no one is staking their life on the fact that the 5 billion mark is being passed in 1987," as opposed to 1986 or even 1988. The data are soft for a variety of reasons. First, it's impossible to take a perfect census, and developing countries in particular don't always have the financial resources for advanced counting techniques. Moreover, not all countries take censuses, and war or heated political climates in places like Afghanistan and Cambodia make counting difficult. In addition, censuses are not taken every year, so analysts

must make assumptions about the growth rates in the intervening five to 10 years.

Even so, Haub thinks the uncertainty in the 5 billion number is only about 1 or 2 percent. He also notes that the accuracy has improved considerably, especially since China, which accounts for 22 percent of the world's population, recently took a careful census. - S. Weisburd

Address communications to Editor, Science News. 1719 N Street, N.W. Washington, D.C. 20036 Please limit letters to 250 words.

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