eter, an instrument to count the totality of heart beats over long periods of time," *A.M.A. Arch. Internal Med.* **41**, 403 (1928)]. The instrument was about the size of a present-day electrocardiograph; precordial electrodes, held in place by straps encircling the chest, were connected to the cardiotachometer by long lead wires.

The miniature heartbeat counter described by us in *Science* is completely self-contained and will permit epidemiologic studies which were not possible with the cardiotachometer developed by Boas.

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Metric System

The American Geophysical Union's Special Committee for the Study of the Metric System in the United States noted your publication of our letter to the editor and its accompanying questionnaire [*Science* **129**, 532 (27 Feb. 1959)]. The committee appreciates your presenting this matter to your readers. It wishes, also, to thank the readers who aided the committee by a generous return of completed questionnaires. Many of the replies included letters containing helpful suggestions and offering financial assistance.

In the September 1959 *Transactions of the American Geophysical Union* your readers will find a full report of the committee, together with an analysis of the replies to the questionnaire received as of July. At this writing, three months later, 1080 have been analyzed. The fields of science and engineering were quite well covered by publication of the letter or questionnaire, or both, in eight leading journals and magazines in the United States. In reply to the most significant question, as to whether it would be desirable to replace the English system by the metric as the "only official system" of weights and measures in the United States, 90 percent replied in the affirmative. The average period of transition suggested was about 22 years; this indicates agreement with the committee on the necessity for a long transition period to avoid economic dislocation. Such a transition period would permit time for education in the schools, normal retirement of presently active older personnel, and normal obsolescence of existing equipment.

The Congress of the United States, for the first time in nearly 30 years, is faced with a decision in this matter. House bill HR7401, introduced last

May by Representative Brooks of Louisiana, and Senate bill S2420, introduced in July by Senator Neuberger, both call for a feasibility study of the problem by an appropriate government agency, with authorization of funds. Also of interest was the introduction in July 1959, by Representative Fulton, of House Concurrent Resolution 364, which would place Congress on record as favoring adoption of the metric system.

It is apparent that the United States must soon decide whether to change over gradually, during the next generation, to a far simpler and more logical system of weights and measures or to continue to be counted with the remaining 10 percent of the world's population that is not yet under the metric system.

Note added in proof. A revised report on the larger number of questionnaires is contained in the December 1959 *Transactions of the American Geophysical Union.*

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Time of Planet Formation

Reynolds (*1*) has recently observed high relative concentrations of Xe^{129} in the chondritic meteorite which fell in Richardton, N.D., in 1919. He correctly attributes this isotope to the decay of fossil I^{129} and derives a time of formation of the meteorite 3.5×10^8 years after element formation. This is to be compared to 2.7×10^8 years for the formation of the earth, according to Katcoff, Schaeffer, and Hastings (*2*), who base their calculations on data for terrestrial xenon, and to 3 to 5×10^8 years for the formation of the moon (*3*).

While in the article on the lunar atmosphere (*3*) several mechanisms were considered and three were selected as indistinguishable upon the basis of available information, the new data strongly support the I–Xe mechanism. It is therefore probable that the rare lunar atmosphere is nearly pure Xe^{129}.

The coincidence of these three ages gives strong support to the hypothesis that the planets were formed in a relatively short period, and to the Moulton and Chamberlain planetesimal hypothesis.

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2. S. Katcoff, O. A. Schaeffer, J. M. Hastings, *Phys. Rev.* **82**, 688 (1951).
3. W. F. Edwards and L. B. Borst, *Science* **127**, 325 (1958).