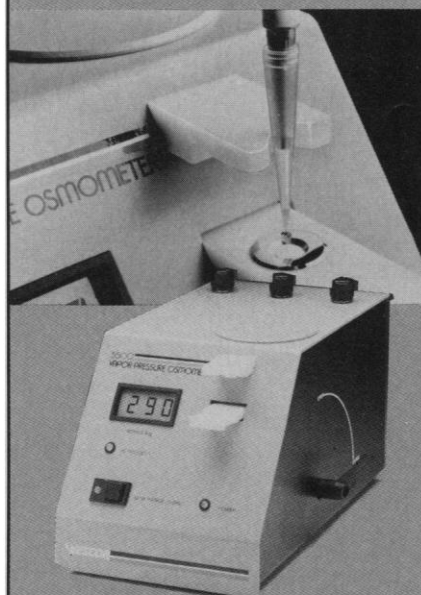


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oms—measured the wet line to its end. The Roman generals thought in miles because this told them how many thousand paces (mille passus) their soldiers would have to tramp before reaching camp and thus how many weary hours lay ahead. I like miles for the same reason. When driving at 60 miles per hour, all road signs tell how many minutes ahead the towns are. I find multiplying by one easier than multiplying by 0.62, especially when driving.

Actually, the ease of decimal conversion between derived units (kilometers, centimeters) and the parent unit (meter), so dear to metric buffs, is only a tiny part of the story. Nature is full of constants—Boltzmann's constant, Planck's constant, the charge and mass of the electron, to name a few—that just don't come out in simple powers of 10 in the metric or any other commercial system. Even the speed of light is only approximately  $3 \times 10^8$  meters per second. Once you've learned to handle these on your calculator, multiplying by 12 or 36 or 5280 is just as simple as multiplying by 10. We are being asked to go metric when its sole advantage has lost its importance.

Much more important to me is to have a wealth of units to choose from—some tiny, some huge, and most with social and historical overtones. I use the metric system a lot; I do so when I feel it is appropriate. But I don't want to be legislated into having to use it all the time. Why am I any better off with a liter of milk than a quart, or a half-kilo of flour rather than a pound? There's too much of Big Brother in this for my taste. Soon I'll have to forget my past, forget that a pint's a pound the world around. Soon a miss will be as good as a kilometer and, if I'm still alive, I'll be centimetering my way to success.

One thing seems certain: strict adherence to metric units would diminish the ability of the scientist to dramatize the grandeur of nature. Tell me that a supernova releases  $10^{51}$  ergs and I yawn. But tell me that in its fiery death it outshines a galaxy of 100 billion stars and I come alive. Then tell me that supernova Bethlehem is still shining in the skies of worlds 2000 light-years farther from it than we were, and I begin to share your excitement. Finally, tell me that the diameter of that sphere of worlds is only one-tenth the diameter of our galaxy, and I catch a faint glimmer of the size and age of the cosmos. Try that in cgs or mks units and see how far you get.

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## Minority Sciences?

In an otherwise excellent Policy Forum on "Minorities at majority institutions" (31 Aug., p. 989), J. H. Wyche and H. T. Frierson, Jr., propose a program to enhance minority involvement in science through minority undergraduate research support (MURS). Then they state, "The fields of undergraduate study would include biology, chemistry, physics, and mathematics." Where are *geology*, *oceanography*, and *meteorology*? Humanity-induced changes to the global environment threaten to disturb the delicate equilibrium of the thin wafer of habitability within which we live: we pollute the air we breathe and the water we drink; we have not solved the problem of disposal of the wastes we create; we consume many natural nonrenewable resources without sufficient plans for the future; and we continue to inhabit new areas without sufficient regard for the availability of water or the problems of natural hazards ranging from floods to earthquakes. These are subjects of primary concern to the *natural sciences*. For minority students, these sciences also provide significant opportunities for productive careers. Let's not forget the importance of the minority *sciences* when we discuss the education of minority scientists.

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*Erratum:* In the report "A plant leucine zipper protein that recognizes an abscisic acid element" by M. J. Guiltinan *et al.* (12 Oct., p. 267), figure 2 (p. 269) was incorrectly printed. The legend was correct. The correct figure appears below.

