



Three Silly Reasons for Not Adopting the Metric System Name _____

The following are three arguments which I've actually heard people put forward against the U.S. completing conversion to the metric system.

1. The English system is based on natural proportions of the human body (1 yard=length from nose to fingertip, etc.), making it a more natural system for humans to use.

Humans vary widely in body measurements. My own foot, for example, is 10 inches, or 25 cm, long-- not 12 inches. For the child learning the English system, one's personal body measurements are very different from those of an adult, making the comparison to body parts less useful. While it's true that English units of length are said to derive from the body proportions of some 12th century king, it's questionable whether anyone actually visualizes a thumb or an outstretched arm when making an eyeball estimate of length.

But perhaps there is nevertheless some mnemonic value in connecting units of measure with body measurements. If you like, you can do this with the metric system, too. My hand is 10 cm wide; my pinky fingernail is 1 cm wide; and it's 1 meter from the floor to my belt. These are nice, even, metric figures which match up with typical adult body measurements at least as well as those of the English system. I can't think of any sense in which a hand-width is less natural than the length of a human foot or the width of a thumb.

2. The motivation for the metric system is that base-10 calculations are easier than the various groupings of 3, 12, 16, etc. found in the English system. However, since we can now do our calculations by computer, this argument goes away.

A great deal of calculation is still performed by hand, and this will continue to be so. For example, carpenters still often do calculations with a pencil on a scrap of wood. The conversions necessary within the English system (e.g., 1 foot = 12 inches; 1 pound = 16 ounces) make these calculations not only more laborious but also more error-prone, resulting in higher costs because of human error.

Further, it takes human effort to program computers, and the complexity of the English system is yet one more snarl to increase software development time. If you are planning to market your software product outside the U.S., you will need to go to the extra expense of supporting both metric and English versions.

True, computers can rapidly convert between feet and inches; but with each such complication, the chance of introducing of bugs in the software becomes greater. With the metric system, all calculations are in decimal math. Since virtually all programming languages have built-in and well-tested support for decimal math, the chance for bugs to arise is much less, as is the programming effort involved.

3. The Fahrenheit scale makes a finer set of divisions than the Celsius scale; to get the same level of precision in the Celsius scale, you have to use a decimal point.

For most people, the difference between, say, 71 and 72 degrees Fahrenheit is of no practical consequence. For example, few people choose their daily clothing based on such a subtle distinction.

The only people who ordinarily need such fine precision in heat measurements are scientists, who are comfortable with the use of the decimal point, and who universally use the Celsius scale anyway.

Okay, I lied. I said there would be three reasons on this page, but here's sort of a fourth reason:

4. Who does the government think it is, telling me what system of measurements I have to use?



Three Silly Reasons for Not Adopting the Metric System Name _____

Standardizing weights and measures is an entirely proper role of government, and the framers of the U.S. Constitution specifically gave Congress this authority. Section 8 of the U.S. Constitution reads in part:

Congress shall have the power ... [to] fix the standard of weights and measures[.]

If it chose, Congress could require the use of the metric system and make an outright ban on the use of the English system. Instead, it has permitted the continued use of the English system, asking individuals and businesses to voluntarily switch to the metric system.

Contrast this with the more direct approach of the European government, which after 1999 is simply banning the import or sale of non-metric products. Starting in 2000, the Netherlands* will actually be imposing a fine for importing or selling products which include any inch-pound measures on the label. From this perspective, the U.S. Congress has been quite generous in respecting individual choice-- for once, probably too much so.

*Update (6 April 1998): I later learned that it is not just the Netherlands which will be imposing the fine, but rather the whole of the EEC. A consortium of American corporations is currently lobbying the European government for the law to be relaxed. However, the original restriction was scheduled to take effect in 1990 and has already been postponed once; American industry did little over the past decade to prepare for the upcoming deadline. Rather than put its energies into lobbying the European government to perpetuate the dual-system situation, American business should put its energies into lobbying the U.S. government to proactively work to complete metrication in the U.S. once and for all.

Source: http://www.ling.upenn.edu/~kurisuto/metric/against_metric.html

QUESTIONS

1. The English system backers state that the English system is based on body proportions. Why is this argument not valid?

- A. Everyone's body has different proportions
- B. Everyone's nose is exactly 1 dm long
- C. You can find useful body proportions for Metric measurements.
- D. Both A & C

2. Since the introduction of computers, English system proponents state that the simpler math of the metric system is no longer needed since computers can do the extra math required for the English system. What is one problem with this argument?

- A. Computers make mistakes too.
- B. Laborers on the job do not always have access to computers or calculators.
- C. Since the English system uses fractions, it makes it easier to convert units.
- D. Most laborers cannot learn the skills needed to use a computer or calculator.

3. Why do people in the U.S. REALLY like the Fahrenheit scale?

- A. They like the fact that water freezes at 32 F.
- B. It makes the term "below zero" a really cold temperature.
- C. There are 180 degrees between the freezing point and boiling point of water.
- D. They are used to it.