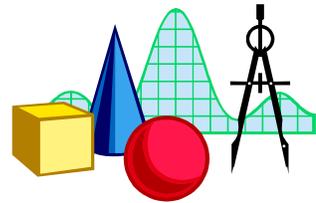


# TAKE IT TO THE MAT

A NEWSLETTER ADDRESSING THE FINER POINTS OF MATHEMATICS INSTRUCTION



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In February, scientists, historians, and educators met in Greenwich, England for the Twentieth International Conference on Chronological Standards (TICCS). The major focus of this conference, and those before it, was to reach agreements on the measurement of time throughout the world. The new regulations adopted by TICCS will have profound implications on the way we will tell time.

The foremost issue addressed at TICCS was the metric system. With few exceptions, such as the United States of America, the world measures length, mass, and capacity with the metric system. The beauty of the metric system, the participants agreed, is in its relationship to our base-ten system of place value. Conversions between metric units require no calculations, only the simple movement of a decimal point. For example, 153.7 centimeters is equal to 1.537 meters. If one is measuring mass, 2.2 kilograms becomes 2,200 grams. No arithmetic is needed. It is a very efficient and timesaving system of measurement. Heinz Bandmass of Germany said, “It sure beats having to divide by 1,760 every time I need to go from miles to yards.”

The members of the conference established that there is one cause for concern, however. If one measures a velocity in units per hour, it requires dividing by 60 to get units per minute, or 3,600 to get units per second. For example, if a jet aircraft travels at 3,000 kilometers per hour, it travels at  $3,000 \div 3,600$  or about 0.83 kilometers per second. Many participants stated that this “inefficient use” of arithmetic cannot be allowed to stand. “There must be a better way!” scientists exclaimed. And so, they devised one.

The TICCS participants decided to “metricize” our standards of time measurement. It was first determined that the basic unit of time measurement would be the “day” as we know it now. Since our lives, not to mention our physical cycles, are dependent on the rising and setting of the sun, the day was the logical choice. There will be 365 days in a year, with the occasional leap year as before. Again, we can’t do much about the changing of the seasons or Earth’s movement around the sun. There, however, is where the similarities to the new system end.

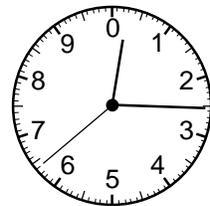
Currently, there are 24 hours in a day, 1440 minutes in a day, and 86,400 seconds in a day. The conference sought to establish new time units, in powers of ten, as close as they could to what we have now. First, the day would be divided into ten equal periods. Using the conventional prefixes for metric units, one-tenth of a day would be a *deciday*, abbreviated “dd”, and nicknamed a “diddy.”

Each diddy would be divided into 100 equal periods. This unit of time is then 1/1000 of a day, known as a *milliday*. It will be abbreviated “md” and known as a “middy.” Each middy is then broken into 100 equal periods. This unit of time is 1/100,000 of a day, or a *centimilliday*. Its abbreviation is cmd, earning it the moniker “smidge.”

The new units of time should be easy to remember. Middy begins with an “M” like minute and smidge begins with “S” like second. Additionally, a *smidgen* is a small quantity, so smidge makes sense. As for diddy, well... at least middy and smidge seem logical.

The new day will begin at “midnight” now known as “diddy zero.” Noon will be “diddy five.” The conference was split on whether to refer to time on the diddy as “o’clock.” The radical reformers eventually relented and agreed to let “o’clock” remain in the time lexicon.

Time is still written with colons separating diddies, middies, and smidges; however, since the clock cycles only once per day, no A.M. or P.M. designations are needed. The face of the analog clock is shown as revised. The time displayed is 0:25:64 or about twenty-five middies past zero.



Conversions between new and old scales of time are shown in the table provided.

The conference understood the repercussions of their decision in that workdays will now be 3.33 diddies instead of eight hours. Employers will probably round to 3 or 3.5 diddies, but how this will impact fringe benefits is unknown. Hour-long television shows will likely be 50 middies (half a diddy); unfortunately, commercials will run 1 middy, a 20% increase relative to the show’s length. Pro football will now be played in four 10-middy quarters and runners will strive to break the 2.78 middy mile. Fortunately, there will be no effect on baseball or golf.

The bright spot in all of this, if there can be one considering its ramifications on society, is that the date will be written the same as it always has been, as shown at the top of this newsletter.

1 hr $\approx$ 0.42 dd
1 hr $\approx$ 42 md
1 min $\approx$ 0.69 md
1 min $\approx$ 69 cmd
1 sec $\approx$ 1.2 cmd
1 dd = 2 hr 24 min
1 md $\approx$ 1 min 26 sec
1 cmd $\approx$ 0.86 sec