

metric fun facts 2019

AAT ICAS #MMd9 review of metrication education

metrication is defined as a process of learning about or practicing the use of metric units of measurement. during Metrication Month 2013 (#MMd3), **AAT at aatideas.org** presented a series of established facts about metrication via **@aatideas** on Twitter. the theme for the tenth month was metrication education.

although AAT selected strongly established facts, there remains much to learn about perceptions of fact and about perceptions of fun in the development of programs for metrication education. thus much work for metrication education remains. the goal of this AAT review is to focus on ways to improve metrication education.

29 statements were selected from **@aatideas** tweets for Metrication Month 2013. hyperlinks, hashtags, and exclamatory punctuation were removed. words that were abbreviated in the original tweets are spelled out here.

for Metrication Month 2019 (#MMd9), a few of the facts were updated to reflect the new reformulation of SI this year.

UNITS PRIMARY

the SI meter, symbolized '**m**', is the primary unit of length.

now defined in terms of a physical constant, the Boltzmann constant, the SI kilogram, symbolized '**kg**', is the primary unit of mass.

the SI second, symbolized '**s**', is a fixed standard of time.

the SI kelvin, symbolized '**K**', is a standard unit of thermodynamic temperature.

the SI ampere, symbolized '**A**', is a standard unit of electric current.

the SI mole, symbolized '**mol**', is a unit of an amount of substance (number of atoms in 0.012 kg of carbon 12).

the SI candela, symbolized '**cd**', is a unit of luminous intensity.

PRACTICAL

with metric, more values can be expressed more readily as whole or decimal numbers.

with metric it is easier to determine more types of measures.

you can write in terms of metric.

you can measure better with metric.

water freezes or melts at 0°C, and water boils at 100°C.

the Celsius unit, symbolized '**°C**', references the temperature from which water freezes (or melts).

you can explain temperatures in terms of metric units by referencing climate data for particular places.

climate is sometimes described in terms of average high and low temperatures for a particular locale.

measuring rainfall? 1 mm of rain = 1 liter per square meter (L/m²).

1 liter of water has a mass of 1 kilogram.

HISTORIC

1875 Meter Treaty (today's SI) introduced a new era of international communication.

the modern metric system is SI, and refers to International System of Units/Système International d'Unités.

electric units were introduced in 1893, and a subsequent definition of the SI ampere appeared in 1948.

accuracies to the SI second are presently estimated to more than a hundred or a thousand million years.

the second is also familiar as a coordinated expression of time, like the hour and minute of a clock time.

the SI units are now exclusively defined in terms of physical constants of atomic and quantum phenomena.

references to the SI meter/metre, symbolized '**m**', as a primary standard of length, are traceable to SI.

many different communications (commercial, scientific, technical) reference principles of writing outlined in SI.

SI is one system of measure for everyone.

many governments, organizations, and businesses have metrication policies.

SI makes possible many advances in science, engineering, and medicine.

the science of measurement is metrology.

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