

SUGGESTED YEAR-ROUND METRIC ACTIVITIES

TO START DURING

SOUTH CAROLINA METRIC WEEK
OCTOBER 8 - 14, 2023

1. Have a school **VIRTUAL** Open House or Parents' Night sponsored by the Science and Mathematics Departments and include a session on "Why we need to teach metric first".
(see page 2 "***How to teach young people what they need to know about Metric!***")
2. Devise a **VIRTUAL** Metric Fair for your school with all metric events. Create a Metric Contest, i.e. - Crossword Puzzles. Have awards for the winners.
3. Write articles for the school or local newspaper promoting the use of metric measurement.
4. Have the Science and Math Departments plan a metric in-service session for the school.
5. **Metric Center** -- Collect and catalog recent, significant articles, books and pamphlets on the Metric System to serve as reference materials.
6. **Shopping Assignments** -- Choose a product line such as food, cosmetics, drugs, hardware, medical devices or sports equipment, and shop for items in that product line which carry labels or descriptions in metric units. Report findings to the class.

MULTIDISCIPLINARY PROJECTS/ACTIVITIES

7. **ART** -- Design posters and bulletin boards to illustrate the Metric System. Make up cartoons to illustrate the humorous aspects of metric conversion. Make a mural of the history of the Metric System. Create Metric Songs. Most art supplies are produced in metric.
8. **ENGLISH** -- Write a glossary of metric terms for the average person working with metrics for the first time. Prepare a series of essays for the school or local newspaper on the advantages of the ongoing metric conversion in the U.S. Have a **VIRTUAL** "Metric Bee" using words taken from a dictionary of metric terms.
9. **HISTORY AND SOCIAL STUDIES** -- Prepare and give an illustrated talk on the history of weights and measures in the U.S. or another country of your choice. Write a brief biographical sketch and description of James Watt, Andre Ampere, Gabriel Moulton, John Quincy Adams or Napoleon. Make a map of the school using metric scale.
10. **HOME ECONOMICS** -- Research how foreign cooks measure food quantities in metric units. Then find a metric recipe (or make one) and have students prepare it. ***Take body measurements in metric units.*** Determine size with a metric pattern chart. Research how clothing is sized in some of the countries already using metric. Ask the lunch room staff to create a "Metric Meal" and have your students prepare signs with metric slogans beside each food item.
11. **PHYSICAL EDUCATION** -- Have a Metric Field Day, with track and field events using the Metric System. Check with AIMS (Activities Integrating Math & Science) for suggestions.
12. **INDUSTRIAL ARTS** -- Measure the standard pieces of lumber such as a 2x4, 1x6, etc., in metric units. What would the nominal dimensions be in the Metric System? Develop a set of plans for a birdhouse, etc., and then build the item, using only metric measuring devices.
13. **DRIVER'S TRAINING** -- Convert mileage, distances, and highway signs to metric units. Research what conversion the Department of Transportation now accepts. Write questions that could be included in a state driver's test to evaluate a driver's knowledge of the metric units that are used in motoring.
14. **ME IN METRIC** -- Ask the students to explore how metric measurements relate to their own bodies. (see Student Activity listed in cover letter "WHAT IS THE AREA OF YOUR SKIN in cm² Body Surface Area)

Check out the United States Metric Association Web-site at usma.org where you will find many links to metric information. One of the best would be the "Metric Guide" for teachers which can be found about halfway down the home page in the teacher/educators section.

**Check out the National Institute of Standards (NIST) Metric Programs at www.nist.gov/kids
It will be FUN!**

Did you know that..?

- Metric minimizes the likelihood of error.
- Metric does not have the numerous conversion factors of other systems.
- Metric has one unit for a quantity.
- Metric is legal, logical and preferred.
- ***Six months to two years of elementary arithmetic could be eliminated with the adoption of SI-Metric.***
- IBM during metric conversion reduced fastener part numbers from 38,000 to 4,000.
- One bottling industry reduced its container sizes from 53 to 7.
- You would weigh 82 kilograms instead of 180 pounds.
- Public Law 103-227 of March 31, 1994, asserts that mathematics and science education, including the metric system of measurement, will be strengthened throughout the system, especially in the early grades.
- All major science and education organizations have encouraged the United States to fully adopt the metric system as the language of measurement.
- The National Association of Academies of Science and the United States Metric Association support our efforts promoting the metric system and metric training for teachers.

METRIC FACTS

***English is the international language of business.
Metric is the international language of measurement.***

☺ - ***How to teach young people what they need to know about Metric!***

1. Teach using only the Metric System.
2. Use rulers and measuring tools that have only metric scale units.
3. Teach measurement and physical quantities using materials and examples that students can see and touch.
4. Select, estimate, compare and use appropriate units to measure:
length (meter/centimeter); mass (kilogram/gram); volume (liter/milliliter); temperature (degree Celsius)
5. Teach by actively involving the students in measuring activities.
6. **Universities and Colleges** that educate elementary school teachers **should teach the system** and how to use it. Very little time should be given to the Customary System. Teachers must know how to teach the Metric System and feel confident by doing so.
7. The change to the metric system is **for all people** and all disciplines (not just science, engineering and math).

Consider becoming a Certified Metric Specialist (CMS)

The CMS program is structured to help maintain professional standards in the field of metrication. With the United States' 50% metric and the rest of the world 100% metric, companies, schools, agencies, businesses, and other facilities will seek personnel who, in addition to their job skills, are knowledgeable about metric. The USMA CMS Program is designed to give both employers and employees the documented evidence that an individual's qualifications have been carefully screened to verify that he or she has the background and ability to use the SI version of the metric system correctly. Free to Apply and take the CMS TEST. You pay \$50.00 if you pass the test. Good entry to have for your vita. For more details see USMA.org under "about" then CMS Program.

Contact: Dr. Don M. Jordan / Center for Science Education / College of Arts & Science / Coker Life Science CLS 108
/ c/o Biology Dept (4th floor CLS), USC Columbia, SC / 29208 djordan@sc.edu

Mark your calendars now for October 9 - 14, 2023, and incorporate Metric Week Activities into your teaching year-round!

Metric Week in South Carolina is sponsored by the

**South Carolina Academy of Science, Founded in 1924 &
The Center for Science Education at USC
The United States Metric Association (USMA)
& Metric Programs at National Institute of Standards (NIST)
Stem Centers in South Carolina**