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NIST

National Institute of Standards and Technology

SI Teacher Kits Available for Educators

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Attention Teachers! Did you know that you can obtain a free set of metric education resources for use in your classroom?

Contact the NIST Metric Program at [TheSI@nist.gov](mailto:TheSI@nist.gov) and include your name, school, subject, grade level, phone number, and mailing address. The NIST SI Teacher Kit contains a classroom set of metric rulers (NIST SP 376 - a 300 mm ruler), laminated metric conversion cards (NIST SP 365), SI Education USB, and other measurement resources.

Our [website](https://www.nist.gov/pml/weights-and-measures/metric-si) ([www.nist.gov/metric](http://www.nist.gov/metric)) has numerous educational materials that can be downloaded and freely reproduced. These resources are helpful to students as they become familiar with the SI, develop reference points or that innate understanding of how much a quantity is, and learn more about SI basics. Your students may find [Everyday Estimation](https://www.nist.gov/pmlwmdindex/metric-program/everyday-estimation) and [Becoming Familiar with the SI](https://www.nist.gov/pmlwmdindex/metric-program/becoming-familiar-si) helpful. In addition, there are several [Unit Conversion](https://www.nist.gov/pmlwmdindex/metric-program/conversions) resources available.

Please note the following recommendations from NIST:

**FAQ: My students are having difficulty using dual measurement unit tools, such as rulers that use both inches and centimeters. They keep mixing up the units! What can I do to improve their learning experience?**

One recommended education best practice is to teach the SI by using the SI. Students must build proficiency and confidence working with metric measurements before they can effectively make comparisons with other measurement systems. Use single system measurement tools whenever possible. Using dual unit measuring equipment can confuse learners because it is easy to select and use the wrong scale. When possible, acquire metric measuring devices (meter sticks, kilogram or gram scales, and Celsius thermometers). If dual unit measurement tools are used (e.g., those using U.S. customary units), block the non-metric units from view. For example, use opaque tape, an index card, or paint to cover up inches on a dual unit ruler.

**FAQ: How do I get a metric ruler?**

Metric rulers are available from many retail vendors, which can be identified by using search terms such as "metric rule," "meter stick," or "metric stick." such as the centimeter [Color-square rules](http://www.vendian.org/mncharity/dir3/paper_rulers/UnstableURL/squares_cm_in.pdf), can be color printed on to overhead transparency sheets to make inexpensive metric rulers. You may also be interested in similar printable teaching aids that create a [liter cube](http://www.vendian.org/howbig/cube/) or a [cubic decimeter box](http://www.vendian.org/mncharity/dir3/dm_box/), which are easily constructed using cardstock.

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## Learn more about us from our video, [Making Connections](http://www.youtube.com/watch?v=Ciov-EVxgnw&feature=youtu.be) found on our webpage.

The National Institute of Standards and Technology (NIST) Summer Institute for Middle School Science Teachers is a two-week workshop for middle school science teachers featuring hands-on activities, lectures, tours, and visits with NIST scientists and engineers in their laboratories.

Teachers who participate in the NIST Summer Institute gain:

* Increased understanding of the subjects they teach
* Increased understanding of how scientific research is performed
* Materials and resources to implement what they learned at NIST in their classrooms
* Increased enthusiasm for science
* A network of scientists and engineers at NIST with whom to consult

Teachers finish the NIST Summer Institute with a wealth of new knowledge about core topics such as forensics and materials science, and materials to integrate these topics into their classroom while meeting curriculum standards.

<http://www.nist.gov/iaao/teachlearn/index.cfm>

Our website [www.nist.gov/metric](http://www.nist.gov/metric) has numerous educational materials that can be downloaded and freely reproduced. These resources are helpful to students as they become familiar with the metric system (e.g., developing reference points for that innate understanding of how much a quantity is) and learn more about SI basics. There are several **Unit Conversion** resources on our website (<https://www.nist.gov/pml/weights-and-measures/metric-si/unit-conversion>) Your students may find **Everyday Estimation** (<https://www.nist.gov/pml/weights-and-measures/everyday-estimation>) and **Becoming Familiar with the SI** (<https://www.nist.gov/pml/weights-and-measures/becoming-familiar-si>) helpful.

The NIST Research Experience for Teachers is a follow-on program that provides two local middle school science teachers with six weeks of real-world research experience at NIST. Completion of the NIST Summer Institute is a prerequisite for participating in the Research Experience for Teachers.

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