

TMTA and TSTA Conferences

The Tennessee Mathematics Teachers Association conference is almost here, September 15 & 16 at Belmont University in Nashville. Early registration is closed, but regular registration is still open here: <https://tmta.wildapricot.org/Conference>



The Tennessee Science Teacher's Association Conference "Science, Phenomena, & the World, Oh My!" is November 2-4 in Murfreesboro. Early Worm registration is only \$165 through 9/15/2023. After that you may register for \$175 through 10/20/2023. Friday's keynote speaker is Jessica Fries-Gaither <https://www.jessicafriesgaither.com/> author of *Notable Notebooks*. Find more information and register here: <https://tsta.wildapricot.org/2023->



Randall Bennett (L) and Lori Allen (R) build equivalent fractions during the Fraction Fun and Fluency workshop.

2023 Summer Workshops

Twenty-nine teachers joined us in June. Dr. Amanda Niedziolomski hosted *Fraction Fun and Fluency* for elementary school teachers in Martin and in Ripley. Dr. Ashley Owens taught *Mechanics Awareness* for middle and high school teachers in Somerville and in Ripley. The mechatronics workshop was supported by a grant from Ford Motor Company and was the STEM Center's first foray into CTE.



Mechanics Group in Ripley

Contact Us

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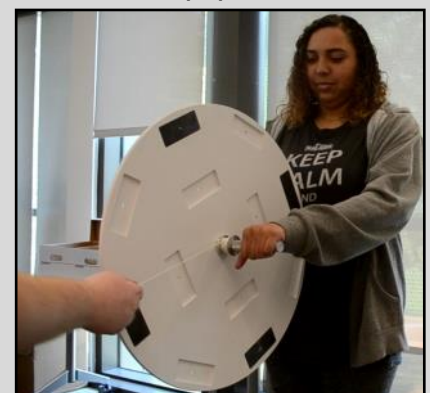
Borrow Some Stuff



Equal-mass cylinders

We have lots of new (to us) Vernier sensors, a gyro-wheel, and a vacuum pump. See the full list of equipment on the webpage: <https://www.utm.edu/offices-and-services/stem-center-for-teaching-and-learning/stem-kits-and-lesson-plans.php>

Select "Equipment" and "View equipment list."



Gyro-Wheel

Fall 2023 Newsletter

STEM Center Interns

UTM Students work each summer to sustain the STEM Center through the entire year. They package equipment for workshops, transcribe satisfaction survey comments, track workshop attendance, and inventory equipment. They move lots of boxes. Lots. Recent interns include Zachary Parker, Maddie Waldrop, Madison Pitts (2019); Grace Looney, Alyssa Black (2021); Joseph Pelren, TaLee Howard (2022); Curt Lynch, and Ciara Henderson (2023). Note the lack of names in 2020. That was a difficult year. None of this works without their work.



Curt Lynch (L) and Ciara Henderson (R) during one of their many trips in summer 2023 moving equipment from Gooch Hall to the Latimer-Smith Building.

Triple Point of Water *The Kids Should See This* is a curated collection of “Smart videos for curious minds of all ages.” There are videos on art, DIY, food, nature, and, more relevant to this newsletter, science. One particularly fascinating video shows water at its triple point, simultaneously boiling, wet, and frozen. <https://thekidshouldseethis.com/post/triple-point-of-water-demonstration> That triple-point, by the way, is 1/100 degree Celsius and 4.58 mmHg, cold with low pressure.

Clean Energy Bright Futures This website is an online solar energy tutorial. There are STEM lesson plans for either elementary, middle, or high school classes. You can browse projects by alphabetical list of schools <https://cebrightfutures.org/browse-projects> and find teacher-generated STEM activities: <https://cebrightfutures.org/teach>

Association for Computing Machinery (ACM) Mid-Southeast Conference The ACM Mid-Southeast conference will be held November 16-17 in Gatlinburg, TN. Thursday: Register and Socialize. Friday: Talks, lunch, board meeting and banquet. The conference is a small (100-150 members) event and is usually composed of faculty and students from Tennessee (and the surrounding states) universities and colleges. It is focused mainly on computer science and CS education. ACM is having a special rate (\$75) for K-12 educators to attend this year. They are welcome to submit abstracts, posters or to talk, but they can also just come and see what it is all about. If they stay at the conference hotel, the hotel price is \$108 per night. Most people stay two nights. See the website for more information. <https://www.acmmidsoutheast.org>

InnovATEBIO Hubs Austin Community College offers these hubs “. . . for specific expertise to create and support biotech programs in high schools and community colleges.” There are eight hubs, each with a different focus: Building alumni networks, Developing interest in biotech careers and entrepreneurship, Incorporating biotech into existing high school biology courses, Developing a workforce, Understanding supply chains, Fostering student research, Understanding genomics, and Increasing productivity of immunotherapy. <https://hubs.innovatebio.org/>