

Upcoming Workshop Opportunities

For information about HCESC workshop opportunities, click on the green [LINK](#) above.

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Contact Us by Email

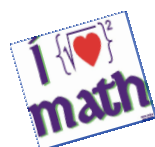
Gale Jorgensen

Dana Mossor

Christina Sherman

Welcome Back!!!

Now that you are and you have filled your room with examples of math in the real world, here are some tips from NCTM for “The First Days of School and All Year Long”.



Become an advocate for mathematics. Celebrate the mathematics learning that is taking place in your school. Collaboratively plan a school-wide math bulletin board, and display student work. Share your experiences (math fairs or family nights, for example) with the local newspaper. Letting others know about your school may result in a tremendous boost to your school’s mathematics program.

Take Notes. Make a place for yourself where you can jot down observations quickly throughout the day. Informal observations early in the year can be helpful further down the road if you have a student who may have a special need or is displaying behavior that continues to disrupt the class.

Use email for parent contacts whenever possible. This saves time and makes it easy to keep a “paper” trail. Parents appreciate the ease of contact. Send them a positive email about something you notice about their student. Those positives are like money in the bank if you do encounter a discipline problem later in the year.



Keep seating charts handy. This will aid you in taking attendance in a split second as students are completing the ‘class starter’, a task written on the board to get their minds into gear. It will be the secret to knowing everyone’s names instantly. The rosters can also be helpful for fire drills, and are invaluable for substitute teachers.

Take a leadership role in mathematics by offering support. Start a professional reading group to discuss mathematics teaching and learning. Schedule a time (even lunch hour) once a month to meet with other math teachers in your school to share ideas and ask each other questions.



Ask the principal to purchase a NCTM school membership. The school membership includes a subscription to a journal, along with other benefits. This is a great way to strengthen the school mathematics program with access to high-quality educational materials and professional development opportunities.

Make mathematics a priority within your classroom. Plan to integrate mathematics with other subject areas. An easy way to get started is to collect children’s literature that promotes mathematical concepts. The **April 2005 focus issue of *Mathematics Teaching in the Middle School*** has several ideas that can be modified for use in the lower or higher grades.



Lastly, let go of the things that don’t really matter. Be conscious of what you are spending your time on as a teacher. Step back regularly and decide what tasks are producing the least gains for your students and eliminate them in order to make time for more worthy tasks or, equally important, time for yourself!

OCTM Annual Conference: Akron, October 14-15

Mark your calendars for the **60th Annual OCTM Conference on October 14 and 15 in Akron!** The conference is one of the best professional opportunities in Ohio every year, and this year's promises to be a terrific experience for all. Visit <http://www.ohioctm.org> for all of the details. Here are some of the highlights:



- **Where is Blue Bear?** Print your picture of the OCTM Akron-Bound bear and take a picture of the bear within one of three themes. Amazing prizes will be awarded! Click **BEAR** for more info.
- **Keynote speakers include Douglas H. Clements, Carole Greenes, Gail Burrill, Brad Findell, Susan Jo Russell and Melendy Lovett.** Click **SPEAKERS** to meet these fantastic leaders.
- **Visit the Teachers Technology Tutoring Tent – T⁴:** Have you ever wished that you knew more about interactive white boards or hand-held technology devices or document cameras but didn't want to admit you didn't know how to use one? This year the OCTM 2010 Conference will host a Teachers' Technology Tutoring Tent to address this issue. Click **TECH** to learn more!
- **What is FLASH DANCING?** There will be nine Flash Dancing sessions. Each of these sessions will focus on one technology-related topic and feature four ten-minute "dances" (presentations) that showcase how this particular technology topic relates to meaningful teaching and/or assessment of mathematical concepts. Information regarding free resources from the Ohio Resource Center will be also available at every session. Click **FLASH** for more info!



Technology Corner - Arcademic Skill Builders

THE STUDENTS DO NOT REMEMBER THEIR FACTS!

If you (or someone you know) have said this, **Arcademic Skill Builders** might just be a website that could help! At this site you will find arcade-style, research-based and standards-aligned free educational math games and language arts games that will engage, motivate, and help teach students. The math skills that students can practice range from basic facts to fractions to ratios to integers. Click on the picture below to give it a try!

Multi-Player Games

Grand Prix Multiplication | [Game Info](#)

Drag Race Division | [Game Info](#)

Tug Team: Multiplication | [Game Info](#)

Single-Player Games

Meteor Multiplication | [Game Info](#)

Space Race Multiplication | [Game Info](#)

Penguin Jump Multiplication | [Game Info](#)

Demolition Division | [Game Info](#)



Brain-Based Research

Source: [How the Special Needs Brain Learns](#) by David Sousa

Teachers of students with ADHD should be on alert for school structures that can unwittingly provoke any student to display ADHD-like behaviors. Classrooms where students sit passively and listen mainly to teacher talk are prime breeding grounds. (pg. 56)



Strategies to Consider:

- Provide a structured, predictable and welcoming environment. As a part of this environment,
 - Post daily schedules.
 - Call attention to any schedule changes.
 - Plan academic subjects for the morning hours.
 - Provide regular and frequent breaks.
 - Do a countdown for the last several minutes of an activity.
 - Shift focus away from competition to contribution, enjoyment and satisfaction.

The Common Core Standards

The **Common Core Standards** were released on June 2, 2010. Ohio adopted these standards June 7, 2010. Click on "[The Standards](#)" to download your own PDF version. As of August 20, 2010, 37 of the 50 states have adopted the Common Core Standards for English/Language Arts and Math. See the latest update on the [Common Core website](#).

[Ohio Department of Education](#) has additional resources about the Common Core Standards on their website.



The Transition Process for Ohio

The following was shared by Denny Thompson, Director of Curriculum and Instruction – ODE

Teacher Development:

- Become familiar with the revised standards documents.
- Provide input into the Model Curriculum
- Participate in groups to develop a richer understanding of the revised standards.

Local Curriculum Development:

- Focus on content depth in the current benchmarks rather than "covering" indicators
- Use inquiry-based instruction in all grades
- Use resources that connect the classroom to the outside world.



Preparation for New Standards

Tasks for Districts

2010-2011	2011-2012	2012-2013	2013-2014
<ul style="list-style-type: none"> • Introduce new standards • Participate in creating model curricula 	<ul style="list-style-type: none"> • Build awareness of new standards • Introduce model curricula • Conduct crosswalk activities • Initiate formative instruction PD 	<ul style="list-style-type: none"> • Introduce performance tasks and scoring rubrics • Continue formative instruction PD • Practice online formative assessments • Introduce instructional improvement system 	<ul style="list-style-type: none"> • Integrate standards and curricula into district curricula and teachers' course planning • Integrate performance tasks in course activities • Prepare for online testing • Complete formative instruction PD

You Can Have A Say!!!

ODE is now beginning the next phase of refining Ohio's Comprehensive Educational System with the development of a Model Curriculum, which will be a Web-based tool for educators. At meetings this fall, teachers may work collaboratively in teams to suggest instructional strategies and resources for the Model Curriculum. To view registration information for the meetings, click on the link below.

[Register for Teacher Team Model Curriculum Meetings](#) (held in our area the end of September)



21st Century Skills -



ICT Literacy Map

Source: [Partnership for 21st Century Skills](#)

21st Century Student Outcomes and Support Systems

- Please visit Route 21 for an interactive view of the framework [here](#)
- Download the *Full Skills Definition Document* [here](#)

We have heard the “buzz,” so we have decided to continue to focus on *21st Century Skills* for our 2010-2011 Math Matters Newsletters. Some of you may recognize this table from the November-December 2009 Math Matters issue. Each issue of the 2010-2011 Math Matters Newsletter will focus on one of the Learning Skills (see the table for details).

ICT Literacy Map

A series of ICT Literacy Maps have been developed that illustrate the intersection between ICT Literacy and core academic subjects. The maps enable educators, administrators and policymakers to gain concrete examples of how ICT Literacy can be integrated into core subjects.

21st Century Lesson Links / Ideas:

K-2: Whose in the Fact Family?

In this lesson, the exploration of the relation of addition to subtraction is continued as the students use problem-solving skills to find fact families.

3-5: Running Races

Students generate and compare paths which model given problem situations on graphing grids.

6-8: Movement with Functions.

This kinesthetic activity allows students to form a physical interpretation of slope and y -intercept by running across a football field. Students will be able to communicate the meaning of the equation to reinforce understanding and discover that slope (or rate of movement) is the same for all sets of points given a set of data with a linear relationship.

9-12: Diagonals to Quadrilaterals

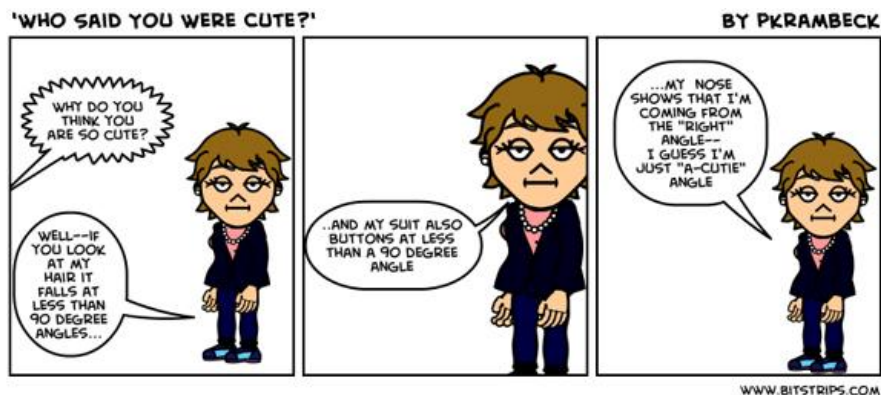
Instead of considering the diagonals within a quadrilateral, this lesson provides a unique opportunity: students start with the diagonals and deduce the type of quadrilateral that surrounds them. Using an applet, students explore certain characteristics of diagonals and the quadrilaterals that are associated with them.

***Note: Not every 21st century skill will be used in every lesson. We want to ensure that we use a variety of lessons that incorporates as many as possible.**

Learning Skills for	21 st Century Skills	21 st Century Tools
Thinking and Problem Solving Math Matters 2010-2011 November-December	Critical Thinking and Systems Thinking <i>Use logical reasoning skills. Becoming numerate. Skillful in using various Problem-Solving strategies.</i>	Word processing software, manipulatives, calculators, graphing calculators, spreadsheet software, and geometry tools.
	Problem Identification, Formulation and Solution <i>Ability to identify, analyze, and solve problems.</i>	Manipulatives, calculators, graphing calculators, Smart Boards, presentation software.
	Creativity and Intellectual Curiosity <i>Develop and communicate ideas to others.</i>	Digital cameras, laptop computers, multimedia presentation software, graphing calculators, probes/CBRs, Website development software
Information, Communication, and Media Literacy Math Matters 2010-2011 January-February	Information and Media Literacy <i>Accessing and managing information. Integrating and creating information. Evaluating and analyzing information.</i>	Newspapers, books, spreadsheets, graphing programs, calculators, computers, Internet, films, TV programs, Websites, databases, internet and digital libraries
	Communication Skills <i>Understanding, managing, and creating effective communications: orally, written, using multimedia.</i>	Word processing programs, graphic programs, presentation software, desktop publishing programs
Interpersonal and Self-directional Skills Math Matters 2010-2011 March-April	Interpersonal and Collaborative Skills <i>Working well on a team. Exercising respect for diversity of opinions.</i>	Calculators, newspapers, Internet, spreadsheet programs, presentation software, video equipment
	Self-Direction <i>Monitoring one's own understanding and learning.</i>	Calculators, computers, books, Newspapers
	Accountability and Adaptability <i>Exercising personal responsibility and flexibility in various contexts. Setting and meeting high standards and goals for one's self and others.</i>	Internet, presentation software, word processing, desktop publishing
	Social Responsibility <i>Acting responsibly with the interests of the larger community in mind. Demonstrating ethical behavior in personal, workplace and community contexts.</i>	Internet, presentation software, newspapers

21st Century Lesson Links / Ideas:

- **Comic Creator Activity: Learning & Innovation Skills** Use a comic creator for students to communicate math understandings using a comic strip format.



This Year - October is Full of Math

Not only is October been proclaimed Metric Month by NCTM (click [HERE](#) for metric activities), but this year there is additional math excitement during this month. On October 10, 2010, the abbreviation for the date will be 10-10-10!!!

After some research, we found no specific lesson plans for that day, but have linked some lessons from the Ohio Resource Center that pertain to tens.

Grades 6-10: [On Beyond a Million: An Amazing Math Journey](#) by David M. Schwartz

Grades 3-5: [It Takes Ten](#)

Grades 1-2: [Links Away: Counting Back and Counting On](#)

If you try them, let us know **what you think!**



Other Math Links and information:

[Greater Cincinnati Council of Teachers of Mathematics](#)

[Ohio Council of Teachers of Mathematics](#)



Math At A Glance

Professional Development Opportunities:

Register: www.hcesc.org Click on PD events



- 21st Century Skills: October 13, 2010
This Learning Institute will focus on the critical skills necessary for teachers and students to be successful in the 21st Century. This day will feature Dr. Jamie McKenzie as the keynote speaker. In addition, participants will attend two additional breakout sessions including a second session with Dr. McKenzie.



NCTM E-workshops

- Two 90-minute sessions deliver **3 hours of Standards-based content**
- **No travel** required
- **One low rate** for an entire group; \$179

Ohio Council of Teachers of Mathematics

OCTM 2010 Conference: Akron, Ohio October 14-15, 2010



FREE Webinar Sept 20 or 21st

- Join this engaging webinar, designed for new and beginning users of Sketchpad!
- Explore Sketchpad activities that are game-like and rich in logical reasoning.
- Learn how Sketchpad's visual, interactive models help ground your students' conceptual thinking.
- Get dynamic Sketchpad models to use in your classroom.

Are you getting information about additional learning opportunities for the math education community? If so, please send Dana or Christina the information so we can add it to our list!!