Oh the Places We’ll Go!

Congratulations!
Today starts the fun!
We’re all on our way
To the web on the run!

We’ll check out some links,
Visit sites yet unseen.
Be reminded of treasures,
Figure out what they mean.

So climb on the bus,
Check your fears at the door,
Turn on your computer,
Go to websites galore!

We’ll go to YouTube to hear my favorite quadratic formula song!
We’ll go to www.mathforum.com to sign up for their weekly online newsletter.
We’ll go to BrainPOP.com for more resources than we could ever want.
We’ll go to websites new to us in every issue.
We’ll even upload videos and photos from OUR students this year, and celebrate the learning that is happening in each of our classrooms.

And through it all, we’ll keep going to the GCTM website for updates specific to US - Georgia Teachers of Mathematics.

This is our opportunity to highlight technology, share technology, and investigate technological innovations we have never tried before!

There is no limit to what we can do! We are ready for YOUR input, for YOUR ideas and suggestions.

Oh the places we’ll go!

Cheryl Hughes, Editor
with thanks to Dr. Judy O’Neal for her inspiration and apologies to Dr. Suess

Cheryl Hughes
Editor
Our newsletter, GCTM Reflections, is officially an on-line journal! Yes, after much consideration, our organization’s sterling communication medium—now called eREFLECTIONS—is a reality! I’m excited about this change and am delighted with its new look and its convenient access to all GCTM members. Since email is the preferred method of communication for most GCTM members, eREFLECTIONS meets those expectations while decreasing labor costs and postage—not to mention saving a tree or two in the process! Even the few without email will be accommodated, so it’s a “win-win” situation for all! Instant access anywhere and outstanding online features will make eREFLECTIONS easy to read as well as a handy teaching reference. Many thanks go to Greg Chamblee and Cheryl Hughes for undertaking this big step. In the mean time, visit the GCTM website and check out the teacher resources. Don’t forget to join our Facebook page! Send comments and suggestions to Cheryl Hughes or me. Alternatively, contact your region representative or our webmaster.

VP Messages

The math competition season is starting soon! For high schools, five tournaments for first semester have been announced already! To find out which ones, go to the math competitions page of the GCTM website.

It’s never too early to prepare for math tournaments, and some great resources are available at the following links.

- **Art of Problem Solving** - The premier math competitions website, this offers forums, practice problems, help, and tons of other stuff. Through this site you can also purchase copies of the books *The Art of Problem Solving*, a resource no Math Team should be without!
- **GCTM Tournament Book** - As state tournament preparation, or as general Math Team problems, GCTM’s own resource of past state tournaments is another valuable resource.
- **Mathematical Association of America’s Contest Problem Books** - The Mathematical Association of America’s series of Contest Problem Books, based on the AMC10, the AMC12, and the AHSME, are another source of excellent problems.

Need to know more? Have some questions? Just want to talk about Math Teams and math competitions in general? **Contact me** or catch up with me at Rock Eagle. I’ll be presenting my annual session about Math Teams with this year’s focus on some of the math needed for math teams that isn’t necessarily in the curriculum! My presentations for my other Math Team sessions over the past five years can be found at my presentations page.

See you soon!
VP Messages cont.

My favorite math educator is_____________. What name popped into your head? GCTM wants to help you recognize mathematical greatness. Visit GCTM’s Grants_and_Awards page to find an award or honor that is just right for your favorite math educator. While you are there, read about GCTM’s mini-grant. You can apply for a $300 grant to help with an innovative teaching idea. The application process has been simplified and is now easier than ever. Take advantage of this great opportunity.

With the launch of eREFLECTIONS, GCTM takes a great leap forward into the technological age! Here are just a few of the advantages of the new delivery system:

- Full color photos, graphs, layouts, etc.
- More current, up-to-date content because there is no delay for printing and mailing.
- No increase in membership dues to cover increased costs for printing and mailing.
- Opportunities for interactive content, including computer applets.
- Clickable links to related content on other sites or pages.

You can probably think of other ways we can take advantage of an electronic edition. Email your suggestions to our eREFLECTIONS editor Cheryl Hughes. Help us make eREFLECTIONS an indispensable teaching resource!

As Georgia’s representative to the National Council of Teacher of Mathematics, I bring greetings from NCTM and look forward to sharing news, new resources, and supplying you, our membership with an on going dialogue from our national mathematics leaders on curriculum reform.

Be sure to visit the exciting display of some of the great resources NCTM offers which you can peruse while at the Fall Georgia Mathematics Conference. You can also go online for all the latest materials!

GCTM Has a New Office and Phone Number

PO Box 5865
Augusta, GA 30916
1-855-ASK-GCTM
Cori’s Tips for New Teachers

Welcome, new teachers! You have chosen a career in which there is never a dull moment! In teaching elementary students at Landmark Christian School in Fairburn, there are many aspects of my job that I enjoy. I love the energy that the students bring to their learning, I enjoy the way the students share their different perspectives about the subjects we study together, and I treasure the relationships I am able to build with the students as the school year progresses. However, the very best part of my job is being there to witness the moment when I know a student “gets it.” That smile or look of wonder on a student’s face when he or she understands something new makes all of the preparation worthwhile.

You are in for quite a ride during your first teaching experience. As you begin your school year, here are several things to keep in mind to help things run smoothly for you and for your students:

• **Get Organized** - Planning your lessons and preparing your teaching materials in advance will help you in several ways. You will know where you are headed with instruction, and you can avoid the extra stress of getting things together at the last minute. Being well prepared can also allow more flexibility in your day. As you are teaching, you may need to slow down your lesson or speed up the presentation according to the needs of your students. Advance planning will allow you to easily make those decisions during your teaching.

• **Review** - Your students will love showing off what they remember from yesterday’s lesson! Begin each class with a brief warm-up activity or “problem of the day” to review previously taught material and get every student involved in the lesson. Be sure to make a note of those students who might need some extra practice or explanation with each concept as you review.

• **Communicate** - Keep your students and parents up-to-date with assigned homework, projects, and test dates through a class newsletter or website. Plenty of communication between home and school will keep everyone on the same page. Also provide parents your email address for contacting you with specific questions. Good communication allows you to team up with your primary partner in the student’s education—his or her parent.

• **Ask for Help** - Some schools pair new and experienced teachers in a mentor relationship for the new teacher’s first year. If you have this opportunity, meet regularly with your mentor teacher and ask questions as they arise. If you aren’t formally paired with a veteran teacher, seek advice from a teacher on your grade level or team. I have found that teachers love to share their ideas, and teachers with experience will be able to steer you in the right direction as you face challenges during the school year.

I hope that during your first year of teaching, you will discover many parts of your job you enjoy. Have a great school year!

*Mrs. Wilson received her BS in Early Childhood Education from Georgia State University. She lives in Newnan with her husband, who is also a teacher, and her four children who all want to be teachers when they grow up.*
The Regional Representatives of GCTM Would Like to Welcome You to eREFLECTIONS

Hello Northwest Region!

Now that everyone is back in school and you are updating all your lists of students in Successmaker, USA Test Prep, Quizdom, Textbook online, and OAS, I just wanted to encourage you if you find yourself frazzled at the beginning of this new year.

Let this year be the year you work smarter! Here are some suggestions:

A. Why not buy an external hard drive so you don’t lose lessons and information.
B. Since Smart Board lessons have worksheets, state tasks, links to video clips, graphic organizers, and quizzes attached to the lesson in the “attachment” section, don’t forget that we can link them to a specific page for reference.
C. Every year we add and change things, so try to rename each file with the current year; that way you can find the right file when looking for it at a later date. Doing so will give us all more time to improve our lessons, find new material to add, and new websites to complement the lesson.
D. Save your lessons in a pdf format and save them to a teacher or school website. This way, students can go there to review or catch up if they were absent for the day.

When you come to the Georgia Mathematics Conference this year, let’s share things that not only help students to achieve, but also help us to become better organized. We will all benefit!

Until October - Karen Lawrence

Welcome to the first issue of eREFLECTIONS! My name is Leanne Luttrell, and I am the GCTM regional representative for the Metro East region. An electronic journal will help us plan regional meetings more efficiently. Please email me with any ideas of ways GCTM can help you! Also, if anyone in our region receives an award, please email me. We want to celebrate together! I hope to see each of you at the conference in October!

Leanne needs another region representative, so please contact her if you’re interested in serving.

Hi fellow mathematicians in Southeast Georgia! I hope to see you at Rock Eagle this October. I look forward to seeing old faces but would love to see some new ones. Why do I go? I go to:

- gain and exchange new ideas with others
- catch up on the latest tools in mathematics education
- take in the latest technology
- make new connections with other math educators
- recharge my batteries at GCTM

See you all there!
The Regional Representatives cont.

A new and exciting event in the resources provided by the Georgia Council for the Teachers of Mathematics: the launch of eREFLECTIONS!

Hello, I am Vicki Mixon, one of the representatives for the Central East region. Currently, I am the Math Trainer for the Department of Education, working with the Mathematics Design Collaborative. Through the Bill and Melinda Gates Foundation, Georgia has received a grant, which allows us to begin professional development to train teachers as they implement Formative Assessment Lessons created by Shell Laboratories (The Shell Centre) and aligned to the Common Core State Standards. Stay tuned for an announcement about a time and place for more information about this training.

I look forward to seeing you at our Georgia Math Conference at Rock Eagle, in October. Go to our website and register today. I would love to hear from you, so feel free to contact me.

Welcome to the Metro West Region!

Greetings Fulton, Cobb, Douglas, Marietta City, and Atlanta Public Schools!

We are Shannon Hart and Carla Bidwell, your Metro West Region Representatives. In honor of our inaugural eREFLECTIONS, we want to share an online tool with you. Are you familiar with National Library of Virtual Manipulatives (NLVM) website?

This site has great graphics, diagrams, illustrations, and examples you can use in your classroom. NLVM has now added an eNLVM website related to the NLVM which contains pre-made lessons and activities. Browse through the list or create your own.

Please join us for the Metro West region meeting during the Georgia Mathematics Conference. We love to hear your ideas on how we can get together as a region to support math instruction.

Come one, come all to the greatest garage sale ever!

This year at Rock Eagle we will be hosting a sale of new and/or slightly used mathematics resources in the Barkuloo Rich building.

Here is a sample of what you might find: overhead and regular blackline master resource books, mathematic manipulatives, workbooks, posters, slightly used mathematics books, and of course new mathematics books. There will be nothing over $5.

The sale begins at 9:00 AM Thursday morning. If you have some wonderful stuff you would like to donate to this sale, just bring it to Barkuloo Rich during the day.

Please have all items pre-priced. $.50, $1...up to $5. All proceeds go to our summer academies 2012 on Common Core Curriculum.
Welcome to a new school year!

It’s hard to believe the summer is over and we are about to pack to travel to Rock Eagle again. Peter Anderson and I are your Central West Regional Representatives, and we want to encourage everyone in our area to consider attending the Georgia Mathematics Conference this year. One of the pledges our region made last year at the conference was to have more of our members attend the conference this year. If you are planning to attend, please be sure to include the Regional Caucus Meeting in your plans. The caucuses are usually held on Thursday evening before the evening session. This is a good time to meet others from the region and find out how you can be involved in GCTM.

We know there are a lot of great and exciting things going on in your classrooms, and we would like to help provide a forum for you to share. With the technology available to us in 2011, there are many possibilities for networking without having to travel. So please let one of us know if you have something to share, and we’ll find a way to connect you with the entire region.

Please let us know if there are ways we can help you achieve your goal of helping ALL students SUCCEED in mathematics.

Kenneth Jones, Central West Regional Co-Representative

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Hello Northeast District!

Welcome to a new school year. I am always amazed every year how much I learn about technology from our elementary students. I want to share three sites my students have shown me over the past year.

- **Math Playground** - Find some fun math games, word problems, logic puzzles, and videos.
- **ConceptuaMath** - Find virtual manipulatives for exploring fractions and decimals. Videos show you how to use each manipulative. Click the “free Tool” area for these.
- **Ambleweb’s Numeracy Hour** - This site has student-made games on it which inspired some kids to design their own math game in our class last year.

Come visit us at the northeast region meeting during the GMC at Rock Eagle in October.

Kate Arnold and Kay Haugan

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The Regional Representatives **cont.**

Kenneth Jones
Central-West Co-Representative

Kate Arnold, left, and Kay Haugen
Northeast Region Representatives

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**eREFLECTIONS is designed by The Digital Pen, Rome, GA**

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Benefits of GCTM Membership

Grants and Awards
Collegiality with teachers and schools across the state
Teacher Academies and Institutes
Motivation to grow

Mission to promote, encourage, reward excellence in teaching mathematics
eREFLECTIONS journal
Math contests for the state
Be on the cutting edge of new curriculum and innovations
Encourage your colleagues to join you as a member
Reduced fees for the Georgia Mathematics Conference
Sharing teaching ideas
Have you logged into www.gctm.org and updated your personal information?
Initiatives to be an advocate to the legislature and state board
PLUs for conference attendance

Hotlinks from Christy

**Exemplars**
Exemplars pioneered the field of performance assessment tasks that meet national standards to improve assessment and instruction. Founded in 1993, Exemplars began by assisting educators using K-8 mathematics problems and assessments that met NCTM Standards.

**Quiz Search**
1. Click Advanced Search (below the search bar).
2. In the Category drop-down menu, select Mathematics.
3. Pick a topic from the Subcategory drop-down menu.
4. Scroll down to view available resource and quizzes for that area of mathematics!

**Fido Puzzle**
1. Click the boy in the lower right corner of the picture to advance through the screens.
2. In the last window, type your answer in the white box using the keyboard (there is not a cursor).
3. Watch the paper in the boy’s hand. You will be amazed.

**Arthur Benjamin does “Mathemagic”**
Want to pump your students up about math? This is amazing. You may want to share with your math teachers and coaches.

**Hotmath**

Solutions for problem numbers in “blue” can be viewed for free, without any type of subscription being purchased. Includes tutorial solutions for pre-algebra, algebra, pre-calculus, calculus, and geometry textbooks.

I hope to see you all at Rock Eagle.

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**Christy Wray**
Southwest Representative

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**Want to see your pictures in the next issue?** Take great shots at Rock Eagle of your workshop, you at a workshop, you and your colleagues at a workshop, and email them to Cheryl Hughes! We want to see Rock Eagle through your eyes!
GaPSC Ruling on Upgrades to Teaching Certificates

In December 2010, the Georgia Professional Standards Commission (GaPSC) Rule made effective a rule that will ensure graduate degrees leading to certificate upgrades are degrees from accredited institutions and are directly related to your current area of certification or a new area of certification.

In the past, any advanced degree has meant an upgrade to your Georgia teaching certificate level (4 = Bachelor’s, 5 = Master’s, 6 = Specialist, 7 = Doctorate) and a resulting increase in pay. Probably each of us has known someone with a higher-level teaching certificate based on a degree that was not directly related to what they are teaching. For example, suppose someone with a Doctor of Widgitry is teaching middle school mathematics. While a doctorate in Widgitry might benefit a teacher in some way, it does not help them in ways directly related to the teaching of middle school mathematics—it is irrelevant for a pay increase.

GaPSC rule 505-2-.41 states that your teaching certificate will only be upgraded if you earn an advanced degree from an in-state or out-of-state institution that is accredited by the National Council for Accreditation of Teacher Education (NCATE) or the Teacher Education Accreditation Council (TEAC), OR by an institution that is classified by the Carnegie Foundation for the Advancement of Teaching as “Research University” or “Very High Research Activity.” In Georgia, there are four RU/VH institutions: Emory University, Georgia Institute of Technology, Georgia State University, and the University of Georgia. On the next page, you will find links to the relevant website to check if an institution qualifies.

GaPSC rule 505-2-.41 also states that only degrees directly related to an area of teaching certification will upgrade your teaching certificate. Those degrees must be a Master’s or higher degree in the GaPSC field of certification in which you already hold a certificate OR degrees in a GaPSC-approved program that leads to initial certification in another teaching field. To add a new area of certification, you must also pass GACE in that area, meet all certification requirements, and formally add the field to your certificate through the GaPSC.

One more related change is that Georgia is adding three new areas of certification: Instructional Technology, Teacher Leadership, and Curriculum and Instruction. According to the GaPSC document Guidance for Institutions of Higher Education, Teacher Leadership “will focus on preparing individuals to serve in teacher leader roles in grades P-12” (p. 5). Instructional Technology “will focus on preparing...
GaPSC Ruling on Upgrades to Teaching Certificates cont.

teachers who wish to effectively integrate technology into their own teaching practice, and educators who wish to assist other teachers in utilizing technology to improve the teaching and learning process” (p. 5).

Curriculum and Instruction “will focus on preparing individuals to support the instructional program for any content area and at any level of schooling by providing educators with deeper and broader knowledge of curriculum, pedagogy and assessment” (p. 5).

If you are currently enrolled in an advanced degree, you are probably covered by the grandfathering period. Click the PowerPoint presentation below or the other documents provided by the GaPSC for specific details about the grandfathering period.

These changes may seem confusing. However, the GaPSC has provided a document to guide teachers in learning more. If you want further information, I would recommend talking with faculty at the colleges or universities near you for additional information specific to your situation.

For more information:

- The GaPSC Ruling
- All GaPSC documents related to this ruling
- PowerPoint overview of the changes
- Carnegie Foundation for the Advancement of Teaching institutions (look for RU/VH under the Basic Classifications menu)
- National Council for Accreditation of Teacher Education (NCATE) institutions
- Teacher Education Accreditation Council (TEAC) institutions

eREFLECTIONS wants to highlight your student video productions!

We want to publish web links to videos created by your students as they teach mathematical concepts or algorithms. So challenge your students to create videos that explain how to multiply matrices, how to graph a line, how to use the Pythagorean Theorem, or some other math skill. We will publish a link to these videos in the next issue and publish the name of your school and class.

(It is best to not use student faces due to privacy issues. So use Gumby, Legos, or just a hand drawing on paper.)

Send in the videos! You and your students could become famous!