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| ***The Virginia Council of Mathematics Specialists*****Members' Newsletter**http://vacms.org/resources/Pictures/VACMS%20logo3sm.jpgSeptember 2017***The Virginia Council of Mathematics Specialists*****Members' Newsletter** |

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| ***The President's Corner***Althoughit sounds cliché, it is hard to believe summer is ending and a new school yearis beginning. This is a critical year for mathematics instruction as we aresupporting teachers as they teach in a crosswalk year.  How is your school division bringing in the2016 Standards of Learning? If you would like to learn about the new standards,or network with other teacher leaders who are also implementing the standardsor learn about different coaching models, then you should attend the 6thAnnual Virginia Council of Mathematics Specialists in Culpeper.  Dr. Robert Berry, President-Elect of theNCTM, will be kicking off this year’s conference with an inspirational keynotespeech.  There are a variety of sessionsto attend from abbreviated SOL Institutes, to coaching models, technologyintegration and much, much more.  Thisyear we are piloting one 150-minute session where attendees will experience andlearn about Math Workshop and Guided Math, and how to coach teachers toimplement this powerful teaching model. I amlooking forward to an exciting conference and reconnecting with old friends andmaking new ones.  I hope to see youSeptember 28 and 29 at the conference! For more information, click [here](http://vacms.org/).    *Corinne Magee* |

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| ***Membership Informtion Corner***

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| Wow, the response to registration for this years conference as overwhelming.  Each year we have seen attendance grow and that is just wonderful since it tells use the conference is valuable service to our members.  And we do pay attention to what you tell us in the follow-up online survey to help improve the conference each year. VACMS is committed to offering a high quality conference  at the most reasonable price possible.  We have been fortunate that Germanna Community College partners with us so that we are able secure space at very reasonable fees. However, the size of the college limits us to the number of rooms we can use so we need to cap registration at 200 and this year we do have a wait list. We are sorry that we could not take everyone who wanted to attend.So we are going to gather some information from members to help the Board decide about following conferences. If you are attending the conference be sure to complete the post-conference VACMS electronic we will be sending out a separate questionnaire so that you can make your ideas known to the Board.  |

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|  http://vacms.org/resources/Pictures/toolapron.jpg***The Utility Apron Resources Corner***The place to learn about new ideas and new resources to help you support teachers in your buildings. |
| **Kristen Brink, K-5 Math Specialist Culpeper County Public Schools, Region IV** ***Part-Whole Relationships in Kindergarten and First Grade*** The 2016 Standards of Learning for Mathematics in Kindergarten state that students will “recognize and describe with fluency part-whole relationships for numbers up to 5” while investigating and describing those relationships with numbers up to 10.  First graders are to be fluent in the relationships to ten.  These standards develop a basis for computational fluency: “thinking flexibly in order to choose appropriate strategies to solve problems accurately and efficiently.” A simple activity for decomposing numbers is “Spill the Beans.”  Students use two-color counters in a cup.  They spill out the cup and record how many of each color they spilled.  For example, if the cup had 7 counters, students could record 5 red and 2 yellow.  It is important that equations are not used on the recording sheet.  For this activity student thinking should be “5 and 2 make 7” not 5 + 2 = 7.  Repetition of this activity helps to build fluency for all combinations that make a number and will build a foundation for addition and subtraction. http://vacms.org/resources/Pictures/Brink_Richardson%20Bk%201.jpgA resource for activities on this topic is Kathy *Richardson’s Developing Number Concepts Book* *1: Counting, Comparing, and Pattern*.   Some useful manipulatives are ten frames, Rekenreks, two color counters, and beaded number strings.  I’ve shared this video from The Teaching Channel, “Quick Images: Visualizing Number Combinations”, in professional develop with my staff.   I have also modeled use of the ten frame for number combinations for some teachers.  They always appreciate seeing it in action. <https://www.teachingchannel.org/videos/visualizing-number-combinations>  |
| **Phyllis Walls, Mathematics Teacher Chesterfield County Public Schools, Region 1*****CAUTION…USE CROSSWALK!***http://vacms.org/resources/Pictures/Wall_Street%20Crossing.pngThe 2017-2018 school year is Virginia’s Crossover year.  Teachers are expected to study and teach from the 2009 Mathematics Standards and the 2016 Mathematics Standards to ensure all students are exposed to content in both sets of standards.Three purposes of the newly adopted 2016 standards are:        Improve Vertical Progression        Improve Consistency of Math Language        Clarify Teaching & Learning ExpectationsGrades 6-8 will see changes in three major content strands:  Equations (including working with integers), Inequalities, and Proportional Reasoning.Teachers will need assistance and clarity as they transition from the 2009 standards to the 2016 standards but more importantly as they begin to teach these standards from a conceptual understanding. This is crucial to providing the foundational support in the solid understanding that a “rate” compares two distinct quantities with different units of measure (rather than only 3 distinct notations for representing a ratio) to more easily make a clear connection in grade 7 and grade 8 of slope representing this “rate of change” which remains constant.The VDOE has provided several resources to help with the shifts.        [2016 Mathematics Standards Curriculum Frameworks](http://www.doe.virginia.gov/testing/sol/standards_docs/mathematics/2016/index.shtml)        [2016 Mathematics Crosswalk documents & narrated Crosswalk presentations](http://www.doe.virginia.gov/testing/sol/standards_docs/mathematics/2016/index.shtml)        [2016 Progression documents for selected Content Strands](https://drive.google.com/file/d/0B5gIt1fNaUALOTVDUmNiRE1XQ0U/view?usp=sharing)As we “cross – over” to our new standards and continue to teach for depth of understanding a worthwhile read and great springboard for colleague discussion is the NCTM article “Twelve Math Rules that Expire in the Middle Grades” by Karp, Bush, Dougherty, Mathematics Teaching in the Middle School, Vol. 21, No. 4 (November 2015), pp. 208-215.A second resource to aid teachers’ mathematical understanding of the richness of theproportional reasoning shifts in the new standards is the introduction to [**Scale City**](https://www.ket.org/education/sitelet/scalecity/index.html), a multi-state grant project exploring the mathematics of scale and scaling, written by Dr. Linda Sheffield, Regents Professor Emerita of Mathematics Education at Northern Kentucky University. |

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*http://vacms.org/resources/Pictures/coaching_next.jpg* |

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