|  |  |
| --- | --- |
|  | District 68 Math Curriculum  Q & A |
|  |  |
| 3/15/2014 | Office of Teaching & Learning |
| Revised 9/15/2016 | The purpose of this document is to provide faculty and staff members quick answers to the most commonly asked questions associated with the implementation of the Common Core Math Curriculum in Woodridge School District 68. |

District 68 Math Curriculum

[COmmoNLY ASKED QUESTIONS]

How was the Math Curriculum developed?

*Under the guidance of Tom Hierck, consultant from the Leadership and Learning Center, District 68 staff members drafted the math curriculum utilizing the Rigorous Curriculum Design process. Curriculum team members carefully wrote units based on prioritized Common Core Mathematical Standards and incorporated the Common Core Standards for Mathematical Practice and the accompanying instructional shifts required by teachers to implement these new standards. Yearly, the curriculum is reviewed and revised.*

Where do i access the district 68 math CURRICULUM?

*Staff can access the math curriculum at* [*www.woodridge68.org*](file:///C:\Users\manjarresr\Desktop\www.woodridge68.org)*. Under the “Staff” drop down link, teachers will click on “Curriculum Guide.” This takes staff to our online curriculum site.*

[*http://d68curriculum.weebly.com/*](http://d68curriculum.weebly.com/) *is a direct link to the curriculum.*

Do parents have access to the math curriculum?

*Yes, parents have access to the curriculum via the district website; they do not have access to the real world experience tasks.*

How Many minutes a day should be allocated to the math curriculum?

*At the kindergarten level, 45 minutes a day are allocated to math instruction; 30 minutes should be spent on explicit math instruction while 15 minutes of math instruction can be integrated into daily calendar routines and other subjects.*

*In first through sixth grades, 60 minutes per day should be set aside for the grade level curriculum implementation and 15 minutes a day should be set aside for individual math fact and number sense fluency development.*

*In grades seven and eight, students receive 45 minutes of daily math instruction. Students needing additional support in the area of math may receive an additional 45 minutes of math intervention at another point during the day.*

How should we group Students for the math curriculum?

*All students deserve to be challenged to excel and deserve peer models that stretch their thinking and abilities. Students should receive math instruction in heterogeneous groupings based on their homeroom. Grade level teachers should not place students in a “high” or “low” math classroom.*

*Students should receive math instruction in heterogeneous groupings based on their homeroom. Teachers of students in grades three and four identified as gifted in math should meet bimonthly with the building Gifted Specialist to develop differentiated lesson plans that build depth to grade level concepts and skills. Fifth and sixth grade students specifically identified as gifted in the area of math or in need of accelerated instruction should receive instruction at an accelerated and enriched pace. These fifth grade math students will learn the sixth grade curriculum in a sixth grade classroom or with the gifted specialist. This decision is made at the building level in consultation with the Assistant Superintendent for Teaching and Learning. Sixth grade advanced math students will learn the seventh grade curriculum taught by the building Gifted Specialist.*

How was the order of units at each grade level determined?

*Grade level teams met in the spring of 2013 to prioritize math content standards in order to allow greater depth of instruction and increased student understanding. Once finalized, curriculum team members looked at developing a pacing calendar according to the natural learning progression of these standards. Subsequently the district continues to refine the units and order while continuing to evaluate the curriculum for effectiveness.*

What is the purpose of the Pacing Calendar?

*The developed pacing calendar indicates when classes will work on each of the math units. Within this calendar, each unit has a set number of weeks for completion. Curriculum writers approximate how long it will take teachers to implement each unit so all units can be completed within the school year. District and building administration expect teachers to be responsive to student needs when implementing the curriculum and recognizes that not all teachers at a grade level will be on the exact same page or topic at the exact same time. In order to prepare our students for subsequent school years, it is the expected that classes work through the entire curriculum.*

What is the purpose of the essential questions listed at the start of each unit?

*Essential questions at the start of each unit are designed to engage students in the learning of the math content by “hooking” them in creative ways so they are able to discover for themselves the related Big Ideas of each unit. The essential questions should be referred to throughout the unit and at the end of the unit to re-engage students in why learning the particular math skill or concept is important.*

Why are pre-assessments important?

*Each unit begins with a pre-assessment to gauge where students are in relation to mastery of the unit targets. Responsive teachers utilize this information to determine where in the unit each child is most ready to begin instruction and to prepare for enrichment activities for those students who are already proficient in the standard.*

What do I (the teacher) do for students who have shown mastery on the pre-assessment?

*Students receiving perfect or near perfect scores on pre-assessments need enriched instruction and challenge above what others in the class may receive from typical unit pacing. The district math specialist, instructional coaches and gifted specialists are available to assist teachers in preparing enrichment activities for students needing this level of differentiation.*

Do we send pre-assessments home with students?

*To let parents know various learning topics students will work with in class, the Parent Pre-assessment Check-off List and/or the Pre-assessment must go home at the beginning of each unit. Pre-assessments are sent home to parents keeping in mind the purpose of a pre-assessment is formative. The pre-assessment begins the process of forming student learning and assists the teacher with determining individual student readiness. In addition, the Parent Newsletter should be sent home too to enhance the communication about the math curriculum.*

Is the pre-assessment score entered into our online grade book?

*There is not a requirement that the pre-assessment is entered into the grade book. Teachers can create an event in the Skyward online grade book to enter the pre-assessment score. This score has no overall weight, but may provide feedback about student learning and growth to parents, students, and teachers when compared to end of the unit assessments (summative/post-assessment).*

Why IS the SUMMATIVE/POST-ASSESSMENT important?

*The summative/post-assessment is a common assessment given to all students in the district at the end of the unit. The purpose of this assessment is to determine a student’s knowledge and understanding of the priority standards at a given point in time. A student’s proficiency level on the post assessment/summative assessment after retakes is reported in the Math Concepts section of the report card.*

How do I (the teacher) mark student tests?

*Teachers should indicate which answers are incorrect, but should not add explanation as to why the item is incorrect. It is important that each student go back to the test and figure out why an error or mistake was made and then determine the best course of action to correct the item.*

Do we send Summative/post-assessments home?

*Post assessment/summative assessments are sent home with the student reflection sheet at the end of the unit. Parents should receive the “Student Assessment Reflection Sheet” at the end of each unit, indicating how students performed on the post-assessment/ summative and the student’s thoughts about their performance. This information provides specific feedback about their child’s thinking in relation to their performance on unit content, and is much more valuable than simply knowing the letter grade, percent or proficiency level.*

What is the purpose of the “Student Assessment Reflection Sheet”?

*Student self-reflection and goal setting are among the most powerful practices utilized in school districts across the world to speed the rate of student learning. With this in mind, all students in first through eighth grade should complete the “Student Assessment Reflection Sheet” at the end of each summative/post-assessment. This form allows students to see items they have mastered and reflect upon those they need to continue to work on mastering.*

How do i (the teacher) use the “Student Assessment RefLection sheet”?

*Student reflection is a powerful learning tool. While taking the assessment, students evaluate their understanding of various problems. Once the teacher has marked questions correct or incorrect, students in 2-8 grades review their assessment and complete their reflection sheet. On the reflection sheet, students evaluate their mistakes. In addition, students set learning goals for the week based on what they have identified as “must learn” topics. Teachers should plan future instruction for the buffer week based on students goals and whether student responses were “Silly Mistake,” “Math/Process Mistake,” or they “Don’t understand the problem.” A simple item-analysis tally can be very helpful to guide next steps in learning.*

what is the purpose of the buffer week?

*The ‘buffer’ week occurs the week between the summative/post-assessment and the summative re-takes. This time gives students another opportunity to solidify their understanding on the material. It also provides teachers an opportunity to more specifically differentiate instruction and learning activities for the student(s) needing either enrichment or intervention*.

How do I Plan buffer week Instruction?

*Enrichment and intervention can take many forms and should be dictated by students’ needs resulting from summative/post-assessment and real world experience outcomes.*

What is the purpose of Summative Retakes?

*The purpose of the summative assessment is to give students the opportunity to show the knowledge and understanding of information learned throughout the unit and buffer week. It is a second opportunity for students to show what they know.*

How Do I grade students who retake their summative assessment?

*Students who take the summative assessment for a second time should only retake test items that were missed the first time, not the entire test. When retakes are given, the higher of the two grades should be entered into the grade book as the final score.*

who should take the extending section of the assessment?

*Students that are solidly meeting the standards of the unit and show that they are operating at the next grade level of understanding should have the opportunity to show what they know. Give these select students the extending section of the assessment. Getting some correct on the extending section provides evidence that the student is at a proficiency level of extending for the unit.*

Should study guides be developed for student use before Summative/post Assessments?

*No. Study guides should not be developed to prepare students for summative/post-assessments. Educationally, we are shifting from a practice of preparing students on the content to be covered to a true assessment of student knowledge and understanding at a given point in time.*

What is a real world experience?

*The Real World Experience (RWE) is an engaging scenario built into each unit to allow students to apply their mathematical knowledge and understanding in a real world way. Each RWE is broken down into several specific tasks that are interspersed over the course of the unit. When used properly, the RWE is the “hook” used to engage students throughout the unit of study in answering the question “Why is knowing this math important in real life?”*

How should the real world experience be taught/sequenced throughout the unit?

*The Real World Experience (RWE) should be introduced to all students at the beginning of the unit through an engaging scenario, so students are aware of expected unit outcomes and goals. Early introduction enables students to make connections to their learning and realize how and when to complete the various tasks as they are learning math concepts. Early tasks are formative in nature and not graded. Information from these tasks provides feedback to both students and teachers, and provides an opportunity for necessary mid-course correction of instruction.*

Should All Real World Experience tasks be done independently?

*Only the final task must be done independently. Individual teachers can determine how other tasks are completed with the understanding that all students should have an opportunity to work on each task and no student should sit back while others do all the work.*

How do I grade the Real World Experience?

*Only the final task, in most cases Task 4, is graded. It shall be the teacher’s goal to ensure all students get to at least a DEVELOPING level on the task based on the scoring guide.*

What part of the real world experience is sent home to parents?

*At the end of the unit, send home the RWE Scoring that indicates student mastery of skills and level of proficiency on the culminating task. In addition, send home all relating materials so that all can see and develop an understanding for how we assess the application of the math skills in the unit.*

What modifications and accommodations can be provided to ELL students?

*Reading word problems and using vocabulary to communicate about mathematics concepts and problems (both orally and in writing) are often raised by teachers as major stumbling blocks for ELLs. Based on a child’s English Language Proficiency level, different modifications and/or accommodations can be made to allow students to close gaps in these areas. Stanford University has published the “Language of Math Templates”- great resources for use with ELLs at all English Language Proficiency levels. Templates can be found at: http://ell.stanford.edu/sites/default/files/math\_learnmore\_files/4.Language%20of%20Math%20Task%20Templates%2010-4-13.pdf. For additional information, please contact an ELL teacher at your building.*

What modifications and accommodations can be provided to IEP students?

*IEP students have specific accommodations listed on their IEPs in order to access the curriculum. Examples of these accommodations include: 1) pre-teaching vocabulary, 2) use of number lines, 3) re-teaching techniques, 4) read test aloud, 5) additional time, and/or 6) guidance through real world experience tasks. See your building Learning Behavior Specialist for specific student accommodations.*

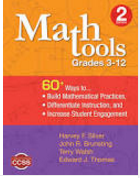
Should homework be sent home nightly to math students?

*It is important that students have an opportunity to develop math fluency on concepts learned in school. In addition to work sent home by teachers to assist in math fluency development, District 68 has purchased the following programs that can be accessed by students from the district website: TenMarks, IXL Math, Reflex Math.*

All math classrooms in the district have the mathematical practices poster displayed. is there a suggested way to use this poster?

*There are numerous ways in which the poster can be used, a couple quick examples include: 1) identify the mathematical practice the class will be using as you introduce the lesson target, or 2) ask students at the end of each lesson to identify the mathematical practice(s) used in the lesson and share evidence of their rationale. Please contact the district Math Specialist for more ideas.*

How do we monitor student progress and check for understanding During the Unit?

*There are a huge assortment of techniques teachers can use throughout the course of the day to check student understanding including entrance and exit slips, quick quizzes, response cards, Kagan Structures, etc. There are specific single question formatives for every standard constructed by Howard County Maryland and posted on our curriculum website. For additional ideas on how to check student understanding during math instructional time, see “Math Tool, Grades 3-12: 60+ ways to Build Mathematical Practices, Differentiate Instruction, and Increase Student Engagement” by Harvey Silver. A copy of this resource should be in every school’s professional development collection.*