

Metropolitan School District of Washington Township

"Superior Schools in a Supportive Community"

Middle School Block Schedule Math Framework

90-minute block of explicit math instruction based on the Five Easy Steps to a Balanced Math Program

Instructional Block	Time	Teaching Goals	Block Structure	Teaching Materials (Five Easy Steps to a Balanced Math Program is a resource for all blocks)	MSDWT Teacher Evaluation (Evidence descriptors for explicit instruction)
Computational Skills: DMR Mental Math Intro to lesson	15 – 25 min. per day	 Provide practice in several math standards Reinforce prior learning and retention of previously taught concepts and skills Provide daily practice of CCSS based on MSDWT pacing guides Make connections to new concepts 	Self-Reflection Student/Student Reflection Mental Math Intro connected to objectives	MSDWT Pacing Guides Current district-adopted texts, resources, initiatives Web resources	Lessons include an <u>Introduction</u> with stated/posted learning objective, make background connections by reminding/asking students what they already know about the topic and use a motivational hook/question to launch activities or work.
Problem Solving	45 – 60 min. per week	 Organize and consolidate mathematical thinking through communication Analyze and evaluate the mathematical thinking and strategies of others Use the language of mathematics to express mathematical ideas precisely 	Whole class Instruction Independent Work Partner Reflection Cooperative Teams Whole Class Sharing	MSDWT Pacing Guides Current district-adopted texts, resources, initiatives Web resources Other visual representations	A <u>mini-lesson</u> (modeling, demonstrating, and student discussion) is presented using interactive lecture. Teacher gives students an opportunity to process the new information and respond to questions.
Conceptual Understanding	20 – 30 min. per "all period" day 30 – 55 min. per block day	 Develop depth of mathematical understanding by connecting meaning to procedures Provide a structured lesson for students that includes a gradual release of responsibility 	Direct whole group instruction Guided Practice Independent/partner/small-group practice in the form of practice problems, activities, games, explorations, math work stations/centers, etc.	MSDWT Pacing Guides Current district-adopted texts, resources, initiatives Web resources Manipulatives Marzano Vocabulary	<u>Guided Practice</u> - asks explicit questions that require students to make inferences, encouraging inquiry and questioning by students as the teacher guides students in the task or activity. Releases students to <u>Independent</u> <u>Practice</u> after ensuring a practical understanding of the concept/skill. The teacher uses friendly controversy for opportunities to debate, argue, explain, infer, draw and defend conclusions. A systematic process for student responses is present. <u>Closes</u> the lesson by reconnecting the learning to the lesson objective and to clarify student understanding. Provides comprehensive review of key content concepts.
Mastery of Math Facts	10 min. per day	 Emphasize operations, number relationships and patterns Reinforce facts through games, flashcards, manipulatives, and literature 	Built into DMR and Mental Math Games, Activities, Computer- based supports	Current district-adopted texts, resources, initiatives Web resources	
Formative Assessments: Checks for understanding DMR quiz, CFA's Formal/informal assessments	Ongoing along with district assessment calendar	 Use formal and informal checks for understanding to help guide instruction Analyze and evaluate the mathematical understanding of specific State Standards 	DMR Quizzes (after 4-5 DMRs) Daily checks for understanding District Assessments Independent Assessments	MSDWT Pacing Guides Current district-adopted texts, resources, test-generators, initiatives School/grade-level CFAs	Collects data about student learning from a variety of sources, including classroom based assessments, district pre-post tests, authentic assessments, rubrics, project work, and portfolios.