## **ELEMENTARY MATHEMATICS**

## Howard County Public School System Department of School Improvement and Curricular Programs Guide for Instructional Level Placement

A mathematics instructional level is determined by a student's performance. Performance should equally measure concepts, procedures, and application of mathematics.

**Purpose**: Provide guidance for determining students' instructional level/which curriculum is appropriate in mathematics. All students should receive instruction at their chronological grade level at a minimum. This document provides guidance in determining if a student is better matched with the next grade level curriculum.

**Above-Grade Level Indicators** Evidence is typically three or more indicators identified below before instruction has been provided.

Indicator	Performance	
Teacher-selected Assessments	Indicate readiness for acceleration*	
Readiness Assessment	Indicates readiness for acceleration*	
MT Assessments and/or Major Works Assessments	Indicate readiness for acceleration*	
Mathematics Learner Behaviors (Attachment A)	Indicates that more than half of the behaviors are frequently evident with on grade-level appropriate tasks	
Measure of Academic Progress-Mathematics (MAP-M)	Meets or exceeds HCPSS Performance Benchmarks (see Chart A). Performance in the 85th percentile is a very strong indicator of above-level needs. Trend performance may be considered.	
MCAP	Performance is 3 or 4	
CogAT QN Score**	Is 80 or greater	

Chart A - HCPSS Mathematics Performance Benchmarks for MAP-M RIT Scores

Grade	Beginning-of-Year	Mid-Year	End-of-Year	
	Benchmark	Benchmark	Benchmark	
1	169-176	179-185	186-193	
2	185-192	193-199	197-204	
3	199-205	205-212	209-216	
4	210-217	215-221	219-226	
5	220-227	225-232	228-234	

**Placement Adjustments**: Student placement should be adjusted when evidence indicates it is appropriate regardless of time of year. Adjustments made after the 2<sup>nd</sup> quarter should have specific structures provided to support the new placement. Specific structures may include moving a student to a new mathematics class with differentiated support, providing appropriate small group instruction in current mathematics class, or scheduling/providing additional mathematics instructional time for the student. When making adjustments, specific structures should be identified and provided to students to support success in the new placement.

- 90th percentile or higher on CogAT QN
- 90th percentile or higher on Fall MAP
- 90th percentile or higher on Winter MAP

In grade 4 or 5, MCAP Level 4 may serve as an additional measure. Additional students may be recommended for G/T Math based upon performance on instructional math tasks.

<sup>\*</sup> Readiness for acceleration is determined by performance prior to instruction.

<sup>\*\* 80</sup>th percentile is not the G/T placement mark. Students whose scores fall within the designated ranges on at least two of three standardized measures will be recommended for G/T Math placement:

## **Mathematics Learning Behaviors**

In mathematics class, the student demonstrates the behaviors below.

		F	0	N
SMP 1	Explains the meaning of the problem.			
	Engages in problem solving (develops, carries out, and refines a plan).			
	Persists when solving problems.			
	Considers if answers make sense and adjusts if needed.			
SMP 2	Represents a problem with equations.			
	Uses numbers flexibly.			
	Examines the reasonableness of his or her answers/calculations.			
SMP 3	Justifies solutions.			
	Listens to the reasoning of others.			
	Compares and asks questions about ideas			
SMP 4	Uses representations for concepts and problems			
	Applies equations where appropriate.			
SMP 5	Selects appropriate tools.			
	Uses tools accurately.			
SMP 6	Calculates accurately and efficiently.			
	Uses mathematics vocabulary.			
SMP 7	Applies prior knowledge to new problems.			
	Looks for relationships and patterns.			
SMP 8	Uses patterns for efficiency.			

<u>Frequently</u> <u>Occasionally</u> <u>Not at this time</u>

## Standards for Mathematical Practice (SMP)

- SMP 1: Makes sense of problems and perseveres when solving them
- SMP 2: Reasons abstractly and quantitatively
- SMP 3: Constructs viable arguments and critiques the reasoning of others
- SMP 4: Models with mathematics
- SMP 5: Use appropriate tools strategically
- SMP 6: Attend to precision
- SMP 7: Look for and make use of structure
- SMP 8: Look for and express regularity in repeated reasoning.