

A quick guide for observing classroom content and practice

In grade 6, instructional time should focus on four critical areas:

1. Connecting ratio and rate to whole number multiplication and division, and using concepts of ratio and rate to solve problems (RP, NS)

2. Completing understanding of division of fractions and extending the notion of number to the system of rational numbers which includes negative numbers (NS)

3. Writing, interpreting, and using expressions and equations (EE)

4. Developing understanding of statistical thinking (SP)

In a 6th grade math class you should observe students engaged with at least one math standard and practice:

Content Standards

Ratios and Proportional Relationships (RP)

- Understanding ratio concepts and using ratio reasoning to solve problems

The Number System (NS)

- Applying and extending previous understandings of multiplication and division to divide fractions by fractions
Computing fluently with multi-digit numbers and finding common factors and multiples
Applying and extending previous understandings of numbers to the system of rational numbers

Expressions and Equations (EE)

- Applying and extending previous understandings of arithmetic to algebraic expressions
Reasoning about and solving one-variable equations and inequalities
Representing and analyzing quantitative relationships between dependent and independent variables

Geometry (G)

- Solving real-world and mathematical problems involving area, surface area, and volume

Statistics and Probability (SP)

- Developing understanding of statistical variability
Summarizing and describing distributions

Mathematical Practices

- Making sense of problems and persevering in solving them
Reasoning abstractly and quantitatively
Constructing viable arguments and critiquing the reasoning of others
Modeling with mathematics
Using appropriate tools strategically
Attending to precision
Looking for and making use of structure
Looking for and expressing regularity in repeated reasoning

NOTES



Mathematics What to Look For Guide

The practices below, which are aligned to the MA Model Teacher Rubric, should be evident in planning and instruction. Any particular lesson will demonstrate some of the practices, not all. For each lesson, artifacts or observables might include: lesson plan, tasks and assessments, teacher instruction, student discussion and behavior, or student work.

Standard I: Curriculum, Planning, and Assessment (I-A, I-B)

- The lesson focuses on grade-level cluster(s), content standard(s), or part(s) thereof.
- The lesson intentionally targets the aspect(s) of rigor (conceptual understanding, procedural skill and fluency, and application) called for by the content and practice standard(s) being addressed.
- The lesson includes clear explanations, representations, and/or examples to make the mathematics of the lesson explicit.
- The lesson intentionally relates new learning to students' prior skills and knowledge.
- The lesson includes opportunities to monitor learning throughout the lesson (such as through questioning or performance on short problems).

Standard II: Teaching all Students (II-A)

- The teacher poses high quality questions and problems, and provides time for students to develop and communicate their thinking about the content of the lesson.
- The teacher used variation in students' ideas and solution methods to strengthen other students' understanding.
- The teacher addresses student variability and diverse needs (including English language learners and students with disabilities) to ensure equitable access to the lesson and achievement of the standard(s).
- The teacher guides student thinking toward the focus of the lesson and references student work and discussion to summarize the mathematics learned.

NOTES