Massachusetts Curriculum Framework | MATHEMATICS | 1

WHAT TO LOOK FOR

A quick guide for observing classroom content and practice

In **grade 1**, instructional time should focus on four critical areas:

1. Developing understanding of addition, subtraction, and strategies for addition and subtraction within 20 (OA)
2. Developing understanding of whole number relationships and place value, including grouping in tens and ones (NBT)
3. Developing understanding of linear measurement and measuring lengths as iterating length units (MD)
4. Reasoning about attributes of, and composing and decomposing geometric shapes (G)

In a **1st grade math** class you should observe students engaged with at least one math standard and practice:

Content Standards

Operations and Algebraic Thinking (OA)

- [ ] Representing and solving problems involving addition and subtraction
- [ ] Understanding and applying properties of operations and the relationship between addition and subtraction
- [ ] Adding and subtracting within 20
- [ ] Working with addition and subtraction equations

Geometry (G)

- [ ] Reasoning with shapes and their attributes

Measurement and Data (MD)

- [ ] Measuring lengths indirectly and by iterating length units
- [ ] Telling and writing time
- [ ] Representing and interpreting data
- [ ] Working with money

Number and Operations in Base Ten (NBT)

- [ ] Extending the counting sequence
- [ ] Understanding place value
- [ ] Using place value understanding and properties of operations to add and subtract

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 uses 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.

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