

RCSS Middle School Framework for Literacy in Math

All middle school math students should be involved in the following to develop conceptual understanding, procedural fluency, strategic competence, and reasoning skills in order to become mathematically literate:

Daily:

- **Building Concepts:** *Important for developing connections between formal and informal math language within a real-world context. Provide opportunities for students to make connections, such as linking drawings to written math notations or relating numeric and algebraic thinking. Use of drawings, visual representations, manipulatives, or other tools necessary to develop an understanding of the concepts as determined by student needs.*
- **Math Talk:** *Student-to-student talk facilitated by purposeful questioning or tasks. Students use a “solve, explain, question, and justify” process to explain their thinking.*
- **Quick Practice/Warm-up:** *Daily fact or previous skills fluency practice.*
- **Math Response/Journals:** *Students should reflect on the process they used to solve a problem, explain a solution, or reflect on the math knowledge required to complete a task.*

Weekly:

- **Mathematical Tools:** *In order for students to attend to precision, they need the opportunity to use mathematical tools frequently and appropriately.*
- **Guided Math Instruction:** *Teachers provide explicit instruction purposefully designed to extend, maintain, or remediate students’ mathematical understanding – based on individual student need.*
- **Math Word Wall:** *Organized by cluster or strand/domain the math word wall includes math content vocabulary that students may need as they deepen their understanding of mathematics. Each word should include a visual representation.*

Regularly:

- **Work Stations:** *Students practice previously learning skills and concepts independently or with a partner while the teacher works with small groups or provides guided math instruction.*
- **Formative Assessments:** *Students need a variety of ways to demonstrate what they know and are able to do. The data should be used to set goals for future instruction.*
- **Technology Integration:** *Build on conceptual understandings or reinforce fluency skills through technology*
- **Math Anchor Charts:** *Reference charts explaining or representing key concepts or skills (teacher or student created)*