

6th Grade Mathematics 2018-19 Overview and Expectations

Mathematics Teachers:

Yoobin Noh yoobin@ms890.org
Daniel Golembe dgolembe@schools.nyc.gov

Curriculum:

Mathematics curriculum is based on the Common Core State Standards. You can find the complete CCSS on www.corestandards.org. Here are the topics we will be covering this year:

1. Number Sense: factors and multiples, properties of numbers, order of operations
2. Rational Numbers: operations with fractions, decimals, and percentages
3. Ratios and Relationships: representing unit rates in tables, graphs, and equations
4. Area and Volume: formulas and how they can be manipulated
5. Algebra: variables, expressions, equations, and inequalities
6. Meaning of Integers: operations with negative and positive numbers
7. Statistics and Data Analysis: mean, median, mode, measures of variability; comparing sets of data and drawing conclusions about populations

Materials needed every class:

- Pencils and eraser
- Math folder
- Loose leaf
- Prior work / homework
- Current textbook
- Planner

Attitudes expected every class:

1. I can learn math to the highest levels.
2. Math is about creativity and making sense.
3. Math is about connections and communicating.
4. Questions are important.
5. Mistakes are valuable.
6. Math class is about learning, not performing.

School-wide Grading Policy:

Assessments 65% <ul style="list-style-type: none"> • Summative 50% (Tests, Performance Tasks, Projects) • Formative 15% (Quizzes, Graded assignments) 	Classwork 20%
	Homework 15%

* Rubrics for classwork grades and homework grades are on pages 16-17 of the Student Handbook.

Math Assessments Rubric:

All assessments, performance tasks, projects, and quizzes are based on the Mathematical Practices.

Problem Solving PS	Model & Represent MR	Reasoning & Proof RP	Communication COM	Attend to Precision AP
Gets correct answer using most efficient strategy and checks answer	Shows multiple representations and understanding of how they relate.	Justifies answer or strategy using mathematical ideas.	Explains what was done and gives mathematical reasons why they chose that strategy.	Uses vocabulary words, labels, units and symbols relevant to solving problem.

Mathematical Practices	Exceeds Standards	Meets Standards	Approaches Standards	Falls Below Standards
Problem Solving PS	Gets correct answer using most efficient strategy and solves correctly with no errors. Checks answer for accuracy and number sense.	Gets answer correct using valid mathematical strategies and solves with a minor computational error. Checks answer for accuracy and number sense.	Gets answer partially correct or has minor mistakes in the set up of the strategy and completes the strategy with inaccurate values. Check is unclear.	Answer is mostly or completely incorrect with no mathematical reasoning evident. No check is made.
Model & Represent MR Use appropriate tools strategically	Uses multiple models, diagrams with accurate labels, equations, tables, symbolic representations and demonstrates an understanding of both and how they relate.	Uses appropriate models, diagrams with accurate labels, equations, tables, or symbolic representations and also demonstrates an understanding of both and how they relate.	Use models and symbols to represent and solve a problem, or explain the solution representation but may not be appropriate.	Does not use models to represent and solve a problem, and has missing, unlabeled or inaccurate mathematical symbols.
Reasoning & Proof RP Look for and make use of structures.	Makes a conjecture and justifies by using mathematical valid reasoning. Is able to prove or disprove with examples and counterexamples. Draws on patterns, structure, generalizations or rules.	Makes a conjecture and justifies by using mathematical valid reasoning. Is able to prove or disprove with/without examples and counterexamples. Draws on patterns, structure, generalizations or rules.	Justifies by reasoning through the process, showing that the math relates to the given problem. The reasoning used is supported by mathematical concepts.	Some mathematical ideas are used to justify strategy or answer.
Communication COM Construct viable arguments and critique others	Effectively explain, and demonstrate clearly how they arrived at their solution. Shows how the math relates to the given problem, and gives reasons why they chose the strategy. Be able to critique the reasoning of others.	Effectively explain, and demonstrate how they arrived at their solution. Shows how the math relates to the given problem, and gives reasons why they chose the strategy. Be able to critique the reasoning of others.	Explain and demonstrate their thought processes through reasoning and examples. Begins to critique the argument of others.	Explain their thought processes through reasoning. May or may not be accurate.
Attend to Precision AP	Accurately uses appropriate vocabulary, symbols, labels and units in the context of the problem.	Uses appropriate vocabulary, symbols, labels and units in the context of the problem.	Uses vocabulary, symbols, labels and units related to the topic but not specific in the context of the problem. Some may not be accurate.	Uses little or no vocabulary, labels or units related to the problem and does not include appropriate symbols.
SELF ASSESSMENT	Exceeds Standards	Meets Standards	Approaching Standards	Falls Below Standards
FINAL SCORE	Exceeds Standards	Meets Standards	Approaching Standards	Falls Below Standards
Parent Signature:				