

Pocantico Hills School
5th Grade Math Curriculum

Process Strands: Strategies the students will use throughout 5th grade in all content strands to develop math skills.

- Know the difference between relevant and irrelevant information when solving problems
- Discuss whether a solution is reasonable in the context of the original problem
- Organize and accurately label work
- Provide an organized thought process that is correct, complete, coherent and clear
- Use appropriate vocabulary when describing objects, relationships, mathematical solutions, and rationale
- Explain the methods and reasoning behind the problem solving strategies used
- Understand that mathematical statements can be supported, using models, facts, and relationships to explain their thinking
- Use physical objects, drawings, charts, tables, graphs, symbols, equations, or objects created using technology as representations
- Understand that some ways of representing a problem are more efficient than others
- Recognize that mathematical ideas can be supported using a variety of strategies
- Share organized mathematical ideas through the manipulation of objects, numerical tables, drawings, pictures, charts, graphs tables, diagrams, models and symbols in written and verbal form
- Interpret information correctly, identify the problem, and generate possible strategies and solutions
- Represent problem situations verbally, numerically, algebraically, and/or graphically
- Work in collaboration with others to solve problems
- Answer clarifying questions from others
- Explain the methods and reasoning behind the problem solving strategies used

Vocabulary: Too many to list! If you are interested, we have included a suggested list of mathematical language given by New York State Department of Education.

<http://www.emsc.nysed.gov/3-8/5mathlang.doc>

General curriculum:

Month	Content strand
September	Real World Math Review Polygons & Circles -using the protractor, measuring angles
October	Division -identify common factors, averages, multiples Measurement -to the nearest cm & 1/8 in
November	Length & Perimeter -using maps Metric System Adding & Subtracting Common Fractions (into Dec.)
December	Analyzing Data -graphs, median, mean, reading and displaying data
January	Working with Large Numbers to 1,000,000 -rounding Multiplication -number patterns Order of Operations Elapsed Time
February	Fractions & Decimals -comparing, adding, subtracting, multiplying & dividing -simplify fractions to lowest terms -convert mixed numbers to improper fractions & back Percent -write as fractions and decimals
March	Estimation Strategies -multiples of 10 -justify reasonableness of answers Working with Ratios Test practice/preparation Circumference & Diameter
April	Area & Perimeter -of all polygons -coordinates
May	Integers Hands-on Algebra - solve equations using basic whole number facts & inverse operations
June	Hands-on Algebra Probability