

Pocantico Hills School
3rd Grade Math Curriculum

Process Strands: Strategies the students will use in 3rd grade to develop skills to tackle math.

- ✚ State a problem in their own words
- ✚ Interpret information correctly, identify the problem, and generate possible solutions
- ✚ Formulate problems and solutions from everyday situations
- ✚ Use physical objects to model problems
- ✚ Verify results of a problem
- ✚ Provide reasoning both in written and verbal form
- ✚ Understand and explain how to organize their thought process
- ✚ Compare and contrast mathematical ideas
- ✚ Use trial and error to solve problems
- ✚ Use process of elimination to solve problems
- ✚ Make pictures/diagrams of problems
- ✚ Analyze problems by observing patterns
- ✚ Determine what information is needed to solve a problem
- ✚ Discuss with peers to understand a problem situation
- ✚ Recognize the presence of mathematics in their daily lives
- ✚ Translate from a picture/diagram to a numeric expression
- ✚ Describe objects, relationships, solutions and rationale using appropriate vocabulary

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/3-8/3mathlang.doc>

General curriculum:

Month	Content strand
September	Relating Addition and Subtraction Two-step word problems, exploring double pattern in addition
October	Reading and Writing 3-digit Numbers Comparing and ordering 3-digit numbers, sequencing, counting and regrouping, #'s to the 1,000's place. Adding 2 and 3 Digit Numbers Creating different addition and subtraction problems, finding the most appropriate method for adding, estimation to find sums of 3-digit numbers, regrouping with 3 digit numbers
November	Developing Multiplication Concepts Exploring factors, finding "turnaround" facts, exploring 0 and 1 as factors, begin studying multiplication facts 0-5
December	Developing Division Concepts Exploring division, modeling division problems, relating multiplication and division, using arrays, looking for patters in division, fact families Understanding Fractions Finding equivalent fractions, developing language to compare fractions, using pattern blocks, visualizing halves and fourths.
January	Investigating Length Customary units of measurement: Length: Measuring to the nearest inch and $\frac{1}{2}$ inch using a ruler, yard, mile Volume: pints, quarts, gallons, cups Weight: using a scale, ounces, pounds Temperature: Degrees Fahrenheit Analyzing Shapes: Plane Figures: Students identify circles, squares, triangles, rectangles, hexagon, rhombus, and trapezoids. Space Figures: Students identify cube, sphere, cone, rectangular prism, cylinder Symmetry, identify congruent and similar figures
February	Collecting and Analyzing Data: Reading bar graphs, comparing two related graphs, interpreting pictures graphs, frequency tables Working With Time: Calculating intervals of time, reviewing past-the-hour times, reading analog clocks to the nearest minute, elapsed time, problem solving with time
March	Investigating 4 Digit Numbers: Exploring 4-digit Numbers, comparing 4-digit numbers Developing Multiplication and Division Facts: strategies for "Fours" facts, "Threes" facts, using arrays for multiplication and division, using multiplication and division in problem solving
April	More Multiplication and Division Facts: Exploring square numbers, finding factors, developing strategies for "nines"
May	Length and Perimeter Investigating Decimals
June	Dividing 2-digit Numbers, Working With Money

