Math Manipulatives by Standard

KINDERGARTEN	
Standard	**Suggested Manipulatives**
NY-K.CC.1-3: Know number names and count the sequence.	Counting Bears Base Ten Blocks Connecting Cubes Number Lines Ten Frames
NY-K-CC.4-5: Count to tell the number of objects.	Counters Ten Frames Number Cubes Base Ten Blocks Connecting Cubes
NY-K.CC.6-7: Compare numbers.	Ten Frames Number Cubes Connecting Cubes Counting Bears Two-Colored Counters
NY-K.OA.1-5: Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.	Connecting Cubes Counting Bears Two-Colored Counters Based Ten Blocks Ten Frames
NY-K.OA.6: Understand simple patterns.	Pattern Blocks Two-Colored Counters Color Tiles Connecting Cubes Attribute Blocks
NY-K-NBT.1: Work with numbers 11-19 to gain foundations for place value.	Base Ten Blocks Ten Frames Connecting Cubes Number Lines Counters
NY-K.MD.1-2: Describe and compare measurable attributes.	Attribute Blocks Pattern Blocks Wooden Geometric Solids Bucket Balance Scale Connecting Cubes
NY-K.MD.3-4: Classify objects and count the number of objects in each category.	Wooden Geometric Solids Attribute Blocks Pattern Blocks
NY-K.G.1-3: Identify and describe shapes.	Wooden Geometric Solids Attribute Blocks Pattern Blocks
NY-K.G.4-6: Analyze, compare, sort, and compose shapes.	Wooden Geometric Solids Attribute Blocks Pattern Blocks

Math Manipulatives by Standard

GRADE 1	
Standard	**Suggested Manipulatives**
NY-1.OA.1-2: Represent and solve problems involving addition and subtraction.	Ten Frames Connecting Cubes Counters Number Lines Base Ten Blocks
NY-1.OA.3-4: Understand and apply properties of operations and the relationship between addition and subtraction.	Ten Frames Connecting Cubes Counters Number Lines Base Ten Blocks
NY-1.OA.5-6: Add and subtract within 20.	Ten Frames Connecting Cubes Counters Number Lines Base Ten Blocks
NY-1.OA.7-8: Work with addition and subtraction equations.	Ten Frames Connecting Cubes Counters Number Lines Base Ten Blocks
NY-1.NBT.1: Extend the counting sequence (to 120).	Hundreds Charts Base Ten Blocks H-T-O Charts Abacus Connecting Cubes
NY-1.NBT.2-3: Understand place value.	Base Ten Blocks Counting Cubes Hundreds Charts H-T-O Charts Number Cubes
NY-1.NBT.4-6: Use place value understanding and properties of operations to add and subtract.	Base Ten Blocks Connecting Cubes Hundreds Charts H-T-O Charts Number Cubes
NY-1.MD.1-2: Measure lengths indirectly and by iterating length units.	Connecting Cubes Color Tiles Base Ten Blocks Dominoes Cuisenaire Rods
NY-1.MD.3: Tell and write time and money.	Clocks Money
NY-1.MD.4: Represent and interpret data.	Wooden Geometric Solids Attribute Blocks Pattern Blocks Color Tiles Money
NY-1.G.1-3: Reason with shapes and their attributes.	Wooden Geometric Solids Attribute Blocks Pattern Blocks Fraction Circles

Math Manipulatives by Standard

GRADE 2	
Standard	**Suggested Manipulatives**
NY-2.OA.1: Represent and solve problems involving addition and subtraction.	Base Ten Blocks Connecting Cubes Counters Hundreds Charts Number Lines
NY-2.OA.2: Add and subtract within 20.	Base Ten Blocks Connecting Cubes Counters Ten Frames Number Lines
NY-2.OA.3-4: Work with equal groups of objects to gain foundations for multiplication.	Base Ten Blocks Connecting Cubes Counters Geoboards with Geobands Graphing Mats
NY-2.NBT.1-4: Understand place value.	Base Ten Blocks H-T-O Charts Connecting Cubes Hundreds Charts Dice
NY-2.NBT.5-9: Use place value understanding and properties of operations to add and subtract.	Base Ten Blocks H-T-O Charts Connecting Cubes Hundreds Charts Dice
NY-2.MD.1-4: Measure and estimate lengths in standard units.	Rulers Measuring Tape Yard Sticks
NY-2.MD.5-6: Relate addition and subtraction to length.	Number Lines Rulers Base Ten Blocks Connecting Cubes Counters
NY-2.MD.7-8: Work with time and money.	Clocks Money
NY-2.MD.9-10: Represent and interpret data.	Rulers Number Lines Graphing Mats Connecting Cubes Unifix Cubes
NY-2.G.1-3: Reason with shapes and their attributes.	Geoboards with Geobands Wooden Geometric Solids Attribute Blocks Pattern Blocks Fraction Circles

Math Manipulatives by Standard

GRADE 3	
Standard	**Suggested Manipulatives**
NY-3.OA.1-4: Represents and solve problems involving multiplication and division.	Counters Connecting Cubes Place Value Disks Abacus Base Ten Blocks
NY-3.OA.5-6: Understand properties of multiplication and the relationship between multiplication and division.	Counters Connecting Cubes Place Value Disks Abacus Base Ten Blocks
NY-3.OA.7: Multiply and divide within 100.	Counters Connecting Cubes Place Value Disks Abacus Base Ten Blocks
NY-3.OA.8-9: Solve problems involving the four operations, and identify and extend patterns in arithmetic.	Algebra Tiles Counters Connecting Cubes Number Lines Multiplication Charts
NY-3.NBT.1-4: Use place value understanding and properties of operations to perform multi-digit arithmetic.	Hundreds Chart Base Ten Blocks Place Value Disks H-T-O Charts Money
NY-3.NF.1-3: Develop understanding of fractions as number.	Fraction Circles Fraction Tiles Number Lines Rulers
NY-3.MD.1-2: Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.	Clocks Number Lines Bucket Balance Scales Metric Units of Mass Beakers
NY-3.MD.3-4: Represents and interpret data.	Graphing Mats Rulers Connecting Cubes Geoboards with Geobands
NY-3.MD.5-7: Geometric measurement: understand concepts of area and relate area to multiplication and to addition.	Graphing Mats Geoboard with Geobands Hundreds Charts Color Tiles Connecting Cubes
NY-3.MD.8: Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.	Graphing Mats Geoboard with Geobands Pattern Blocks
NY-3.G.1-2: Reason with shapes and their attributes.	Attribute Blocks Pattern Blocks Fraction Circles

Math Manipulatives by Standard

GRADE 4	
Standard	**Suggested Manipulatives**
NY-4.OA.1-3: Use the four operations with whole numbers to solve problems.	Counters Connecting Cubes Place Value Disks Abacus Base Ten Blocks
NY-4.OA.4: Gain familiarity with factors and multiples.	Counters Connecting Cubes Abacus Base 10 Blocks Color Tiles
NY-4.OA.5: Generate and analyze patterns.	Connecting Cubes Base 10 Blocks Color Tiles Pattern Blocks Attribute Blocks
NY-4.NBT.1-3: Generate place value understanding for multi-digit whole numbers.	Hundreds Chart Base Ten Blocks Place Value Disks H-T-O Charts Connecting Cubes
NY-4.NBT.4-6: Use place value understanding and properties of operations to perform multi-digit arithmetic.	Base Ten Blocks H-T-O Charts Connecting Cubes Hundreds Charts Dice
NY-4.NF.1-2: Extend understanding of fraction equivalence and ordering.	Fraction Circles Fraction Tiles Connecting Cubes Base Ten Blocks Ten Frames
NY-4.NF.3-4: Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.	Fraction Circles Fraction Tiles Connecting Cubes Base Ten Blocks Ten Frames
NY-4.NF.5-7: Understand decimal notation for fractions, and compare decimal fractions.	Hundreds Charts Base Ten Blocks Connecting Cubes Number Lines
NY-4.MD.1-3: Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.	Ruler Bucket Balance Scale Metric Units of Mass Clocks Money
NY-4.MD.4: Represent and interpret data.	Number Lines Rulers Fraction Tiles
NY.4.MD.5-7: Geometric measurement: understand concepts of angles and measure angles.	Protractors Geoboards with Geobands Pattern Blocks
NY.4.G.1-3: Draw and identify lines and angles, and classify shapes by properties of their lines and angles.	Protractors Geoboards with Geobands Pattern Blocks

Math Manipulatives by Standard

GRADE 5	
Standard	**Suggested Manipulatives**
NY-5.OA.1-2: Write and interpret numerical expressions.	Place Value Disks Connecting Cubes Counters Base Ten Blocks
NY-5.OA.3: Analyze patterns and relationships.	Base Ten Blocks Hundreds Charts Place Value Disks Connecting Cubes
NY-5.NBT.1-4: Understand the place value system.	Place Value Charts Fraction Tiles Connecting Cubes Base Ten Blocks
NY-5.NBT.5-7: Perform operations with multi-digit whole numbers and with decimals to hundredths.	Place Value Charts Connecting Cubes Hundreds Charts Abacus
NY-5.NF.1-2: Use equivalent fractions as a strategy to add and subtract fractions.	Fraction Tiles Fraction Circles Connecting Cubes
NY-5.NF.3-7: Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	Fraction Tiles Fraction Circles Connecting Cubes
NY-5.MD.1: Convert like measurement units within a given measurement system.	Rulers
NY-5.MD.2: Represent and interpret data.	Number Lines Rulers Fraction Tiles Beakers
NY.5.MD.3-5: Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.	Base Ten Blocks Connecting Cubes
NY-5.G.1-2: Graph points on the coordinate plane to solve real-world and mathematical problems.	Geoboards with Geobands
NY-5.G.3-4: Classify two-dimensional figures into categories based on their properties.	Pattern Blocks Geoboards with Geobands

My Math Manipulative Kit Lists

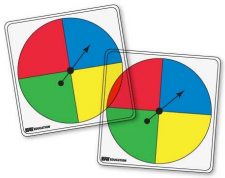
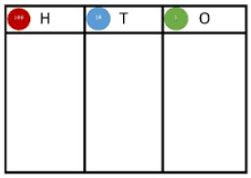
Grade K	
Attribute Blocks	Number Cube, Red – Numbers 0-5
Bucket Balance Scale	Number Cube, Blue – Numbers 5-10
Blank Cubes with Labels	Pattern Blocks
Classroom Dial Spinner	Student Clocks
Color Tiles	Two-Colored Counters
Connecting Cubes	Two-Sided Graphing Mat
Demonstration Clock	Wooden Geometric Solids

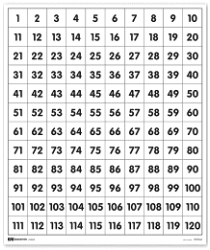
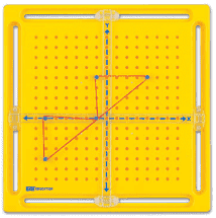
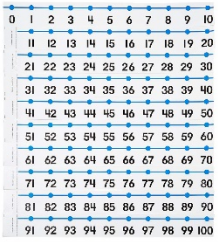
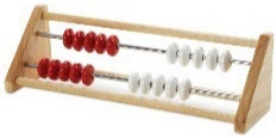
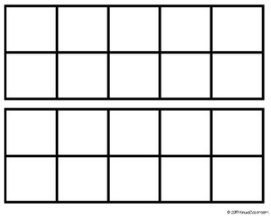
Grades 1-2	
Attribute Blocks	Geoboards with Geobands
Base Ten Blocks – Cubes	Money – Dollar Bills
Base Ten Blocks – Flats	Money – Quarters
Base Ten Blocks – Rods	Money – Dimes
Base Ten Blocks – Units	Money – Nickels
Bucket Balance Scale	Money – Pennies
Classroom Dial Spinner	Number Cube, Red – Numbers 0-5
Color Tiles	Number Cube, Blue – Numbers 5-10
Connecting Cubes	Pattern Blocks
Demonstration Clock	Student Clocks
Fraction Circles	Two-Color Counters
Fraction Tiles	Wooden Geometric Solids

Grades 3-5	
Base Ten Blocks – Cubes	Geoboards with Geobands
Base Ten Blocks – Flats	Metric Units of Mass
Base Ten Blocks – Rods	Money – Dollar Bills
Base Ten Blocks – Units	Money – Quarters
Blank Cubes with Labels	Money – Dimes
Bucket Balance Scale	Money – Nickels
Classroom Dial Spinner	Money – Pennies
Color Tiles	Pattern Blocks
Connecting Cubes	Place Value Disks
Demonstration Clock	Student Clocks
Fraction Circles	Transparent Spinners
Fraction Tiles	Two-Color Counters

Additional Manipulative Options	
Abacus	Number Lines
Algebra Tiles	Pop-Its
Counting Bears	Playing Cards
Cuisenaire Rods	Protractor
Dice	Rekenreks
Dominoes	Rulers
H-T-O Charts	Ten Frame
Hundreds Chart	Unifix Cubes

Manipulatives Image Glossary

Abacus 	**Algebra Tiles** 	**Attribute Blocks** 	**Base Ten Blocks – Cubes** 
Base Ten Blocks – Flats 	**Base Ten Blocks – Rods** 	**Base Ten Blocks – Units** 	**Blank Cubes with Labels** 
Bucket Balance Scale 	**Classroom Dial Spinner** 	**Color Tiles** 	**Connecting Cubes** 
Counting Bears 	**Cuisenaire Rods** 	**Demonstration Clock** 	**Dominoes** 
Dice 	**Fraction Circles** 	**Fraction Tiles** 	**H-T-O Charts** 

Hundreds Chart 	**Geoboards with Geobands** 	**Metric Units of Mass** 	**Money – Dollar Bills** 
Money – Quarters 	**Money – Dimes** 	**Money – Nickels** 	**Money – Pennies** 
Number Cubes, Red – Numbers 0-5 	**Number Cubes, Blue – Numbers 6-10** 	**Number Lines** 	**Pattern Blocks** 
Playing Cards 	**Pop-Its** 	**Protractors** 	**Rekenreks** 
Rulers 	**Student Clocks** 	**Ten Frames** 	**Transparent Spinners** 
Two-Color Counters 	**Two-Sided Graphing Mat** 	**Unifix Cubes** 	**Wooden Geometric Solids**