## **Math Manipulative Glossary**

The use of manipulatives dates back to early civilization. Manipulatives enhances the math experience by deepening math discovery, understanding and promotes math discourse. Manipulative usage also makes math fun!

Manipulative	Description	Name
	The Geoboard app is a tool for exploring a variety of mathematical topics introduced in the elementary and middle grades. Learners stretch bands around the pegs to form line segments and polygons and make discoveries about perimeter, area, angles, congruence, fractions, and more.	Geoboard
	Number Frames help students structure numbers to 5, 10, 20, and 100. Students use the frames to count, represent, compare, and compute with numbers in a particular range.	Number Frames
	Math Clock helps students become fluent working with time. Learners use analog clocks with geared or free-moving hands to learn how to tell time, explore jumps with count by numbers, and visualize story problems involving intervals of time.	Math Clock
	The Fractions app lets students use a bar or circle to represent, compare, and perform operations with fractions with denominators from 1 to 100. Choose the fraction model and number of equal parts.  Use a color to select specific parts to show a fraction of the whole.	Fractions
1 2 3	Number Line helps students visualize number sequences and illustrate strategies for counting, comparing, adding, subtracting, multiplying, and dividing. Choose number lines labelled with whole numbers, fractions, decimals.	Number Line
C -	Money Pieces help students visualize and understand money values and relationships. Two versions of coins and bills are provided: virtual currency pieces that replicate the appearance and relative size of U.S. coins and the dollar bill, and area money pieces.	Money Pieces
	Students use Pattern Shapes to explore geometry and fractions, create their own designs, or filling in outlines. As they work with shapes, students think about angles, investigate symmetry, and compose and decompose larger shapes.	Pattern Shapes

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	Number Pieces helps students develop a deeper understanding of place value while building their computation skills with multidigit numbers. Students use the pieces to represent multi-digit numbers, regroup, add, subtract, multiply, and divide.	Number Pieces
	Math Vocabulary Cards help students deepen their conceptual understanding of key terms in mathematics. Each card features three sections: a math term, a representative example or model, and a concise definition.	Math Vocabulary Cards
	Number Rack facilitates the natural development of children's number sense. Rows of movable, colored beads encourage learners to think in groups of fives and tens, helping them to explore and discover a variety of addition and subtraction strategies. Free activities and free book available.	Number Rack
123	The Whiteboard App is a digital workspace for teachers and students to solve problems and explain their thinking. Math concepts can be explored in a variety of ways using a flexible set of tools to sketch, write, and build equations.	Whiteboard App