## Math Tools and Manipulatives

| Item | Description | Quantity |
| :---: | :---: | :---: |
| AIMS Algebra Blocks | Foam blocks for teaching algebra concepts | 3 |
| AIMS Base Ten Blocks | Used for basic mathematical concepts such as place value, addition, subtraction, number sense, and counting | 3 sets |
| Algebra Tiles | Demonstrate addition, subtraction, multiplication, and division of algebraic equations | 29 Sets <br> 1 Overhead <br> Set <br> 1 Booklet |
| Attribute Blocks | Use for teaching sorting, patterns, size comparison and other early math skills | 3 Big Sets <br> and 10 <br> Small Sets |
| Balance | Mass balance to compare weights of two items: <br> - ETA Student Balance - 1 <br> - OHAUS Primer Balance - 12 <br> - Foss Student Balance - 5 <br> - One Plastic Red Balance - 1 <br> - Nasco Student Balance - 9 <br> - Simple Scales Kit - 1 <br> - Includes: 1 Base, 1 Tower, 1 Top Bar, 2 Hangars, 2 Bowls, 5 Ten Gram Weights, and 5 Five Gram Weights <br> - Bathroom Scales - 3 | 27 Total and 1 Kit |
| Base Ten Block Paper | Pads of paper of blackline masters to provide a spatial model of the base ten system | 6 |
| Base Ten Metric Volume | Provide a spatial model for the base ten number system and to investigate number concepts | 59 Cubes |
| Base Ten: Bags of Coffee Stirrers, Rubber Bands | Used for base ten and place value understanding | 5 |
| Beads | Large wooden beads of varying shape and color | 3 small bags, 1 large bag |
| Buttons | Colored buttons of varying sizes for different activities. | 1 Bag containing 30 Buttons |
| Clocks | Student clocks for learning to tell time | $\begin{aligned} & 1 \text { large; } 10 \\ & \text { small } \end{aligned}$ |
| Cuisenaire Pattern Blocks | Various shapes (triangles, trapezoids, hexagons, squares, rhombi) used to develop spatial understanding, geometry concepts, and to create patterns | 1 Five Quart Bucket Full |
| Cuisenaire Rods | "Cuisenaire Rod Assortment" Wood Kits - 18 <br> - 22 white, 12 red, 10 light green, 4 orange, 6 purple, 4 yellow, 4 dark green, 4 black, 4 brown, and 4 blue | Various |


|  | Unlabeled Wood Sets - 11 <br> Small Bag - 1 <br> Big Bag - 1 <br> Bag of Plastic Fraction Cuisenaire Rods - 7 <br> Bag of Green Plastic Tens and Ones Pieces - 1 <br> Bag of Orange Wood Tens and Hundreds Pieces - 1 <br> $10 \times 10 \times 10$ Wood Cube - 1 |  |
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| Dice | One cup of regular dot die and one bag of numeral die | 16 White <br> 21 Green <br> 18 Red <br> 16 Numerals |
| Dice (Polyhedral Dice Set) | A jar of dice from the standard die to a die going up to 18. | 1 jar |
| Foam Shapes | Colored Tetris shaped foam pieces | 16 |
| Fraction Circles | Nasco fraction circle pieces make up a $3-1 / 2$ " circle. Set includes: $1,1 / 2,1 / 3,1 / 4,1 / 5,1 / 6,1 / 8,1 / 10$, and $1 / 12$ fraction pieces | 18 |
| Fraction Cubes | Demonstrate relationship of parts to whole while exploring and comparing fractions, decimals, and percents | 3 |
| Fraction Deck <br> "The Everything Math" | A deck of flashcards with fractions illustrated on one side and numbers on the other side | 7 decks |
| Fraction Rainbow Tiles | Rainbow colored blocks used to show what fractions and percentages look like | 1 set |
| Fraction Rulers | Colored "rulers" that show different fractions | 1 set |
| Fraction Spheres | Demonstrate relationship of parts to whole while exploring and comparing fractions, decimals, and percents | 3 |
| Fraction Squares | Nasco fraction square pieces make up a $2-3 / 4$ " square. Set includes: $1,1 / 2,1 / 3,1 / 4,1 / 5,1 / 6,1 / 8,1 / 10$, and $1 / 12$ fraction pieces | 18 |
| Fraction Stax | Model with fraction pieces to analyze $1 / 12$ all the way to <br> 1. Ideal for grades 2-6 | 1 set |
| GeoBoards | Peg boards and rubber bands for teaching geometric concepts, problem-solving, exploring shapes, spatial relationships, designs, angles, fractions, perimeter, area, and symmetry. <br> - Blue $7 \times 7$ peg square with circle on the reverse side -35 <br> - Green $5 \times 6$ offset square with activity cards - 30 <br> - Blue $5 \times 5$ peg square with circle on the reverse side - 19 <br> - Thick Cork Board Black 5x5 square and separate circle board - 1 of each <br> - Clear $11 \times 11$ square - 2 <br> - Clear $11 \times 13$ offset square - 1 | Various |


|  | - Clear $5 \times 5$ square -1 plain and 2 labeled with letter and number coordinates <br> - Clear circle |  |
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| Geometric Exploration: Small Envelope Games | The Fascinating Triangle - 2 <br> Triangle Mysteries - 2 <br> Exploring the Square - 2 <br> Trapezoid Secrets - 1 <br> The Five Ray Problem - 1 | Various |
| Geometric Fractions | Colored plastic squares/rectangles to demonstrate fractions | 2 |
| Geometric Measuring Vessels with Volume Markers | 2 Cylinders - 1 One Liter and 1 Half Liter <br> 1 One Liter Wide and Stout Cylinder <br> 2 One Liter Cubes <br> 1 One Liter Rectangle | Various |
| Geometric Models | 3D shapes including cones and cubes | 1 set of 25 shapes |
| Geometric Models Set | Explore ratios, investigate volume and discover geometric relationships | 1 |
| Geometric Solids | Investigate volume, surface area, and nets by filling this set of 12 geometric solids with either wet or dry materials | 3 |
| Geometric Volume Set | Explore ratios, investigate volume and discover geometric relationships with six plastic shapes, each with four inch bases and diameters. | 1 |
| Geometry Reflect-View (Red T's) | Teach the basics of geometry, including axes of symmetry, reflections, transformations, and congruence. | 27 |
| "I have...Who has..." Cards For Classroom Round Robin Game | Addition/Subtraction Multiplication Facts <br> Addition-Subtraction Basic Facts and Vocabulary <br> Multiplication Facts Pictures of Sets <br> Basic Facts Multiplication/Division <br> Fractions <br> 2 Place Decimals with Base ten Block Pictures <br> 1 More, 1 Less - 10 More, 10 Less <br> Time Vocabulary: Minutes, Hours, Days, Months, <br> Seasons <br> Time to the Nearest Five Minutes <br> Time to the Nearest Quarter Hour <br> Money, Coin Notation | 1 deck of each category |
| Measurement Tools | Gallon Milk Jug - 1 <br> Quart Milk Jug - 10 <br> Pint Carton-1 <br> Pint Water Bottle - 1 <br> Cup Carton - 1 <br> Unlabeled Glass Jars - 3 | 1 box |
| Michigan Department of Education Training Materials Kits | Demonstrate place value and base ten concepts with Base Ten Blocks and Play Money | 22 Small Totes |


| Michigan Math Improvement Brown Boxes | Sets of laminated strips with fractions and decimals - 19 in boxes and 1 extra set <br> Protractors, Rulers for Overhead Projector | 2 |
| :---: | :---: | :---: |
| MMPI State Improvement Grant Booklets | MMPI Number \& Operations -7 yellow and 2 pink <br> MMPI Measurement -3 green and 6 orange <br> Mathematics AYP Measurement - 5 green <br> MMPI Algebra - 3 light blue <br> Mathematics AYP Algebra - 4 periwinkle <br> MMPI Geometry -6 green and 4 yellow <br> Mathematics AYP Geometry - 5 yellow <br> MMPI Data \& Probability - 6 gold and 5 purple | Various |
| Omnifix Cubes | 3D folding and interlocking cubes | 1 set of 300 cubes |
| Document <br> Camera/Overhead <br> Teacher Materials | Hundred Number Tiles <br> Pattern Blocks (2) <br> Pentominoes <br> Base Ten Blocks Deluxe Set <br> Attribute Blocks <br> Fraction Tiles <br> Assorted Shapes in Assorted Colors and Sizes (2 boxes and 1 set of bags) | 1 of each unless specified |
| Percent Cubes | 1 Set Plain <br> 1 Set Percent Cubes <br> 1 Set Decimal Cubes |  |
| Play Money | 9 Sets of 1 's, 10 's 100 's, 1,000 's, 10,000 's, and 100,000 's <br> 1 bag of dimes <br> 1 bag of pennies <br> 6 Sets Containing Five 100's, Five 50's, Fifteen 20's, <br> Twenty 10's, Twenty-Five 5's, Thirty 1's, 20 quarters, 4 half dollars, 20 dimes, 20 nickels, and 30 pennies each. <br> 1 Overhead Set containing 4 half dollars, 10 quarters, 12 dimes, 12 nickels, and 32 pennies. | Various |
| Playing Cards | Full decks of standard playing cards | 12 |
| Snap Cubes | Model math concepts, explore cubes and squares of numbers, investigate patterns, and place value | 2 bags |
| "Space Tivitz" Game | Board game where the objective is to try and save the universe using your math skills. Great for ages $8+$. | 11 |
| Spinners | One to Five - 5 <br> Zero to Nine - 5 | 10 Total |
| Tangrams | Tubs filled with geometric shapes <br> Bins of wooden tangrams - 2 <br> Various sized bags of wooden tangrams - 5 <br> Bag of plastic tangrams - 1 <br> Box of thin foam tangrams - 1 <br> Kits containing: - 13 <br> - 4 small squares and 4 large squares <br> - 4 small circles and 4 large circles | Various |


|  | - 4 small triangles and 4 large triangles <br> - 4 small parallelograms and 4 large parallelograms |  |
| :---: | :---: | :---: |
| Ten Frame \& Dot Card Set | Help students to see the different combinations that make 10 and to internalize the value of these numbers and their relationships | $\begin{aligned} & 104 \text { cards } \\ & \text { per set } \\ & 2 \text { sets } \end{aligned}$ |
| Tetris Pieces | Use problem solving and logic to solve this square tetris puzzle | 12 sets |
| Tricon Decade Puzzle | Helps to solve the reversal problem and teaches number sense through decade orientation | 1 |
| Tiny Polka Dot Game | A colorful card deck with 16 easy-to-learn games that playfully teach math. | 1 |
| Visual Thinking Deck | 100 Illustrated problem cards | $\begin{aligned} & \text { Set A - } 1 \\ & \text { Set B - } \end{aligned}$ |
| Weights | Kits of Plastic Stackable Pieces - 3 in boxes and 3 in buckets <br> - 20-1 gram pieces <br> - 20-5 gram pieces <br> - $10-10$ gram pieces <br> - 5-20 gram pieces <br> Bucket of Metal Weights of Varying Sizes and Shapes ranging between 50 and 500 grams - 1 <br> Container of Staking Weights - 12 <br> - 1 gram, 5 gram, 10 gram, and 20 gram pieces <br> Wooden Stackable Hexagon Weights <br> - 17-5 gram pieces <br> - 20-10 gram pieces <br> 10-20 gram pieces | Various |
| Whistles | Metal whistles with blue lanyard | 3 |
| White Boards | One side blank and one side base ten grid, comes with whiteboard markers and mini erasers | 12 |
| Whiteboard Magnets | Pentominoes <br> Cuisenaire Rods <br> Base Ten Blocks <br> Tangrams <br> Pattern Blocks <br> Red Dots <br> Number Tiles <br> Fraction Squares | 1 of each |
| Wooden Cubes | Illustrate area and volume, measurement, averaging, and counting | 1 (5 qt bucket) |

