



Organizing for Targeted Add+VantageMR[®] Instruction

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*Empowering educators to advance student mathematical
thinking and success ... through Math Recovery[®] Principles*

Tubs for Math Materials:

General Supplies Available to Students at all times:

- Arithmetic racks and screens
- AL abacus
- 1-100 decks
- Treasure Hunt decks
- Place value arrow cards
- Pencil boxes of connecting cubes, 2 colors per box arranged in sticks of 10 (5+5 per stick)
- Popsicle sticks (individual, bundles of 10, and 10 bundles in sandwich bags)
- Cups, foam sheets, or felt for screening activities
- White boards
- Erasable sleeves (like Smart Pal sleeves)

Number Words and Numerals (teacher tub):

- Numeral Tracks
- Numeral strips 1-5, 6-10, 11-15, 16-20, 21-25, 26-30, 31-35
- Numeral strips for multiples
- Numeral rolls 1-100, 101-200
- Dot strips 2s, 5s, 10s, 3s
- Clothes line and clothes pins
- Sequences of numbers to order
- Place value dice
- Hundred chart
- 2-digit and 3+-digit 20 Questions
- 1-100 decks
- Treasure Hunt
- Arrow Cards
- Numeral cards/birthday cards with numbers
- Blank cards

Structuring (teacher tub):

- Dot cards (regular and irregular)
- Great Race game board
- 5 frames (1 color, 2 color, and complements)
- 1-100 deck
- 10 frames (5-wise and pair wise, 1 color, 2 color, and complements)
- 10 cubes (5 each of 2 different colors)
- 20 frames (10 wise, doubles, and complements)
- Dominos or domino cards

- "Five and Ten" Game, pg. 129
- "Clear the Board" game board, pg. 132
- Rekenrek book (free download from The Math Learning Center)
<http://catalog.mathlearningcenter.org/store/product-8473.htm>
- "Runs Away Ones/Take Away Tens" cards
- Dice for "Roll 3 for 20 or Bust"
- "Show the Sum" dice
- "Count and Compare" game board
- Hundred chart
- Screens
- Arithmetic racks
- AL Abacus
- Leap Frog game boards
- Place value dice
- Mini ten frames (Red book CD)
- Blank dice (0-5, 2-7, 4-9, 5-10, 4-9, etc.)

Place Value (teacher tub):

- Popsicle sticks (individual, bundles of 10, and 10 bundles in sandwich bags)
- Screens
- Place value dice
- Arrow cards
- AL abacus
- Mini ten frames (Red book CD)
- Place value strips (Red book CD)
- Leap Frog and other game boards

Multiplication (teacher tub):

- Counters and paper plates or circles or cubes and bowls
- N-tiles (2, 3, 5)
- 10X10 array cards
- Screens
- Various array cards
- Array Bingo cards
- Sets of fact cards (X2, X10, X5, X3...then X4, X9, X6, X8, X7)
- Mini-Multo, factors and multiples games (Red book CD)

Forward (Backward) Number Word Sequences

FNWS (BNWS) to 10 Activities (for children at FNWS/BNWS Levels 0-2)

Activity	Materials
➤ Count Around, pg. 42	
➤ Secret Numbers, pg. 46	Numeral cards 1-10
➤ What Comes Next (Before)? pg. 43	Numeral tracks, numeral strips to 10
➤ The Numeral Roll pg. 50	Numeral Roll
➤ Treasure Hunt (Where Do I Go? pg. 48)	Treasure Hunt cards
• Say the next (or previous) one, two, or three numbers	
• Pair verbal tasks with written and quantitative activities	

- Wright, R., Stanger, G., Stafford, A., & Martland, J. (2015). *Teaching Number in the Classroom with 4-8 Year Olds Second Edition*: SAGE Publications.

Forward (Backward) Number Word Sequences

FNWS (BNWS) to 30 Activities (for children at FNWS/BNWS Level 3)

Activity	Materials
➤ Count Around, pg. 42 or Counting Choir, pg. 43	
➤ Secret Numbers, pg. 46	Numeral cards 1-30
➤ What Comes Next (Before)? pg. 43	Numeral tracks, numeral strips to 30, number roll
➤ The Numeral Roll pg. 50	Numeral Roll
➤ Treasure Hunt (Where Do I Go? pg. 48)	Treasure Hunt cards
• Continue the count	Optional: numeral cards to 30 from which to draw a starting number
• Say the next (or previous) one, two, or three numbers	Optional: numeral cards to 30 from which to draw a starting number
• Pair verbal tasks with written and quantitative activities	

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Forward (Backward) Number Word Sequences

FNWS (BNWS) to 100 Activities (for children at FNWS/BNWS Level 4)

Activity	Materials
➤ Count Around, pg. 42 or Counting Choir, pg. 43	
➤ Secret Numbers, 46	Numeral cards 1-100
➤ What Comes Next (Before)? pg. 43	Numeral tracks, numeral strips to work on crossing decade, number roll to 100
➤ The Numeral Roll pg. 50	Numeral Roll
➤ Treasure Hunt (Where Do I Go? pg. 48)	Treasure Hunt cards
• Continue the count	Optional: numeral cards to 100 from which to draw a starting number
• Say the next (or previous) one, two, or three numbers	Optional: numeral cards to 100 from which to draw a starting number
• Pair symbolic verbal with written and quantitative activities	

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Forward (Backward) Number Word Sequences

FNWS (BNWS) beyond 100 Activities (for children at FNWS/BNWS Level 5)

At this point instruction can go 2 directions. One is to continue verbal sequences by one with larger numbers. The other is to develop non-count-by-one strategies. Typically these begin on the multiple (5, 10, 15... or 10, 20, 30...) and progress off the multiple (7, 12, 17... or 27, 37, 47...). Be sure to also include BNWS, especially by tens on and off the decuple.

- Use number rolls 100-200 to help children continue the count beyond 100
 - Use n-tiles of 5, 10, 2, etc. to develop the verbal sequence of skip counting by 5, 10, 2, etc.
 - Count Around with Multiples, pg. 192
 - Counting Choir, pg. 43
 - Treasure Hunt
- Wright, R., Stanger, G., Stafford, A., & Martland, J. (2015). *Teaching Number in the Classroom with 4-8 Year Olds Second Edition*: SAGE Publications.

Numeral Identification

Numerals to 10 Activities (for children at Numeral ID Level 0)

Activity	Materials
➤ Numbers on the Line, pg. 42	Numeral cards 1-10, clothes line, clips
➤ What Comes Next? pg. 43	Numeral tracks, numeral strips to 10
➤ Stand in Line, pg. 45	Numeral cards 1-10
➤ Secret Numbers pg. 46	Numeral Cards 1-10
➤ Can You See Me? pg. 46	Birthday cards or other cards with numerals and a screen (or SMART board)
➤ Treasure Hunt (Where Do I Go? pg. 48)	Treasure Hunt cards
• Pair symbolic tasks with verbal and quantitative activities	
• Numeral flash cards	Use blank cards to make numeral flash cards for those commonly confused, i.e. 6 and 9.
• Sequence 1-10	Numeral cards 1-10

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Numeral Identification

Numerals to 20 Activities (for children at Numeral ID Level 1)

Activity	Materials
➤ Numbers on the Line, pg. 42	Numeral cards 1-20, clothes line, clips
➤ What Comes Next? pg. 43	Numeral tracks, numeral strips to 20
➤ Stand in Line, pg. 45	Numeral cards 1-20
➤ Secret Numbers pg. 46	Numeral Cards 1-20
➤ Can You See Me? pg. 46	Birthday cards or other cards with numerals and a screen (or SMART board)
➤ Treasure Hunt (Where Do I Go? pg. 48)	Treasure Hunt cards
• Pair symbolic tasks with verbal and quantitative activities	
• Numeral flash cards	Use blank cards to make numeral flash cards for those commonly confused, i.e. 6 and 9, 12 and 21, 13 and 30 and 31.
• Sequence 1-20	Numeral cards 1-20

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Numeral Identification

Numerals to 100 Activities (for children at Numeral ID Level 2)

Activity	Materials
➤ Numbers on the Line, pg. 42	Numeral cards 1-100, clothes line, clips
➤ What Comes Next? pg. 43	Numeral tracks, numeral strips to work on crossing decade
➤ Stand in Line, pg. 45	Numeral cards 1-100
➤ Secret Numbers pg. 46	Numeral Cards 1-100
➤ Can You See Me? pg. 46	Birthday cards or other cards with numerals and a screen (or SMART board)
➤ Take Your Place, pg. 47	Place value dice (tens and ones) and white boards or cards to write numerals
➤ Treasure Hunt (Where Do I Go? pg. 48)	Treasure Hunt cards
• Make and Break Numbers, (pg. 43 of first edition)	Arrow cards (tens and ones)
• Pair symbolic tasks with verbal and quantitative activities	
• Numeral flash cards	Use blank cards to make numeral flash cards for those commonly confused, i.e. teens, decuples, and teen reversals.
• Sequence 1-100	Numeral cards 1-100

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Numeral Identification

Numerals to 1,000 Activities (for children at Numeral ID Level 3)

Activity	Materials
➤ Numbers on the Line, pg. 42	Numeral cards to 1000, clothes line, clips
➤ What Comes Next? pg. 43	Numeral tracks, numeral strips to work on crossing decade
➤ Stand in Line, pg. 45	Numeral cards to 1,000
➤ Secret Numbers pg. 46	Numeral Cards to 1,000
➤ Can You See Me? pg. 46	Birthday cards or other cards with numerals and a screen (or SMART board)
➤ Take Your Place, pg. 47	Place value dice (hundreds, tens and ones) and white boards or cards to write numerals
➤ Treasure Hunt (Where Do I Go? pg. 48)	Treasure Hunt cards
• Make and Break Numbers, (pg. 43 of first edition)	Arrow cards (hundreds, tens and ones)
• Twenty Questions	Twenty Questions board with numerals to 1,000
• Silent Line Up (Students draw a numeral card and line themselves from least to greatest or greatest to least without talking.)	Numeral cards to 1,000 or have students roll place value dice to create a 3-digit number
• Write numbers in expanded and standard form	Place value dice (hundreds, tens and ones) and white boards to write numerals

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Numeral Identification

Numerals to 1,000,000 Activities (for children at Numeral ID Level 4)

Activity	Materials
➤ Numbers on the Line, pg. 42	Numeral cards to 1,000,000; clothes line; clips
➤ Stand in Line, pg. 45	Numeral cards to 1,000,000
➤ Secret Numbers pg. 46	Numeral Cards to 1,000,000
• Make and Break Numbers, (pg. 43 of first edition)	Arrow cards (We printed cards to 1,000,000 on cards stock)
• Twenty Questions	Twenty Questions board with numerals to 1,000,000
• Write numbers in expanded and standard form	Place value dice (thousands, hundreds, tens and ones) and white boards to write numerals

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Numeral Identification

Numeral Activities (for children at Numeral ID Level 5)

- Compare and order numbers to 1,000,000
- Children's Literature
 - *Count to a Million* by Jerry Pallotta
 - *How Much Is a Million?* by David Schwartz
 - *On Beyond a Million* by David Schwartz
- Discuss negative numbers
- Read, write, draw, and compare fractions
- Read, write, draw, and compare decimals

Structuring

Structuring to 5 Activities (for children at Structuring Level 0)

[Focus on partitions of 5 and small doubles]

Activity	Materials
➤ Bunny Ears / Finger Patterns, pg. 81	NOTE: Initially, especially depending on the child's construct, the child may need to make finger patterns that are in front of the child and visible rather than bunny ears.
➤ The Great Race, pg. 82	Game board (on CD), dice, 6 markers
➤ Quick Dots (irregular and regular spatial patterns), pg. 83	Dot cards with regular and irregular patterns, dice
➤ Five- and Ten- Frame Flashes, pg. 85	5 frames and 10 frames (pair wise and five wise) With ten frames, the goal is to identify the number of dots.
➤ Make Five Concentration (with 5 frames or with numerals), pg. 84	5 frames, numeral cards 1-5
➤ Make Five Fish, pg. 89	Sets of 0-5 cards
➤ Domino Five Up, pg. 89	dominos
• Cube trains to 5	5 cubes
• Make 5 Snap (Use cards 1-5. Call out the other part to make 5, i.e. call out 4 when 1 is turned over.)	Sets of 1-5 cards
• Verbal or written tasks (bare numbers or situational problems with combinations to 5)	NOTE: Students can solve problems with larger numbers. We are working for automaticity to 5 (immediate responses).

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Structuring

Structuring to 10 Activities (for children at Structuring Level 1 or 2)

[Focus on 5 plus, partitions of 10, addition with whole ≤ 10 , subtraction with parts ≤ 5]

Activity	Materials
➤ Make 10 Concentration (with 10 frames or with numerals), pg. 84	10 frames, numeral cards 1-10
➤ Ten Frame Flashes, pg. 85	10 frames (5-wise and pair-wise, two color and one color and complements)
➤ Domino Flashes (combinations to 10), pg. 87	Dominos
➤ Domino Fish, pg. 88	Domino cards, numeral cards
➤ Make Ten Fish, pg. 89	Sets of 1-9 (or 0-10) cards
➤ Bunny Ears / Finger Patterns, pg. 81	Focus on combinations to 10
➤ Naming and Visualizing Pair-Wise, pg. 118, and Five-Wise, pg. 119	Arithmetic rack, screen
➤ Make Ten Ping Pong, pg. 90	
➤ Clear the Board, pg. 132	Clear the board game board, counters, 2 dice
❖ See and Slide, pg. 7	Arithmetic rack, 1-10 numeral cards
❖ Multiple Ways to Find a Sum, pg. 9	Arithmetic rack, 1-10 numeral cards
❖ It Takes Two to Build a Number, pg. 11 (numbers to 10)	Arithmetic rack, 1-10 numeral cards
❖ Build a "Doubles" Numbers, pg. 13 (numbers to 10)	Arithmetic rack, ten frame cards, variation with 1-10 numeral cards
• Cube trains to 10	10 cubes (5 each of two colors)
• Turn Over Ten	Sets of 1-9 (or 0-10) cards
• Make Ten Pyramid	Sets of 1-9 (or 0-10) cards
• Make 10 Snap (Use cards 1-10. Call out the other part to make 10, i.e. call out 4 when 6 is turned over.)	Sets of 1-10 cards
• Verbal or written tasks (bare numbers or situational problems with combinations to 10)	Horizontal +/- fact cards with whole ≤ 10 <i>NOTE: Students can solve problems with larger numbers. We are working for meaningful habituation to 10.</i>

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Structuring

Structuring to 20 Activities (for children at Structuring Level 3 or 4)

[Focus on 10 plus, big doubles, partitions of 20, addition and subtraction with whole ≤ 20]

Activity	Materials
➤ Domino Flashes (going up to doubles 9 or beyond), pg. 87	Dominos
➤ Twenty Frame Flashes or Double Decker Bus Flashes, pg. 124	Twenty frames (ten-plus and doubles and complements)
➤ Using Ten-Plus Combinations, pg. 127	Empty 20 frames, counters
➤ Five and Ten Game, pg. 129	Regular die, 5 and 10 die, game sheet
➤ Naming and Visualizing Pair-Wise, pg. 120; Five-Wise, pg. 120; Ten-Wise, pg. 121	Arithmetic rack, screen
➤ Addition and subtraction on the arithmetic rack, pg. 121-123	Arithmetic rack, screen, written addition and subtraction tasks
❖ Build a “Doubles” Numbers, pg. 13 (numbers to 20)	Arithmetic rack, ten frame cards, variation with 1-20 numeral cards
❖ It Takes Two to Build a Number, pg. 11 (numbers to 20)	Arithmetic rack, 1-20 numeral cards
❖ Show the Sum, pg. 15	Arithmetic rack, special dice or numeral cards (5-10 and 4-9)
❖ Roll 3 for 20 or Bust, pg. 17	Arithmetic rack, special dice (red 0-5, blue 2-7, green 4-9)
❖ Target Think Addition, pg. 19	Arithmetic rack, 1-20 numeral cards
❖ Tens or Ones, pg. 21	Arithmetic rack, 2 sets of numeral cards 11-19, run away ones and take away tens cards
❖ Count and Compare, pg. 23	Game board and cards
• Make 20 Snap (Use cards 1-20. Call out the other part to make 10, i.e. call out 4 when 16 is turned over.)	Sets of 1 – 20 cards
• Math games involving basic addition and subtraction facts	Supplies vary
• Verbal or written tasks (bare numbers or situational problems with combinations to 20)	Horizontal +/- fact cards with whole ≤ 20 <i>NOTE: Students can solve problems with larger numbers. We are working for meaningful habituation to 20.</i>

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Structuring

Structuring beyond 20 Activities (for children at Structuring Level 5)

[Focus on conceptual place value and higher-decade addition and subtraction]

Activity	Materials
<input type="checkbox"/> Incrementing and Decrementing by Tens with Screened Bundling Sticks, pg. 89	Sticks, bundles of ten sticks, large screen
<input type="checkbox"/> Add to or Subtract from the Decuple ($60 + 4$, $70 - 3$), pg. 139 and 142	Mini Ten Frames
<input type="checkbox"/> Next (or Previous) Decuple (Draw a number. How many to the next for previous decuple? For example, if 43 is drawn, how many do you need to add to get to 50? How many do you need to subtract to get to 40?), pg. 139 and 143	Numeral cards 1-100, AL Abacus, Mini Ten Frames
<input type="checkbox"/> Addition and Subtraction Involving a Non-decuple and 1-9, pg. 139	Numeral cards 1-100, AL Abacus, Mini Ten Frames
<input type="checkbox"/> Multi-digit addition and subtraction games such as Leap Frog, pg. 150	Game boards (some on CD), spinners, 2-color counters
<input type="checkbox"/> Jump to 100, pg. 153, and Jump from 100, pg. 155	Hundreds board, spinners, markers, paper/pencil for recording
<input type="checkbox"/> Target Number, pg. 155	Hundreds board transparency, translucent counters
<input type="checkbox"/> Make 100 (Draw a number. What goes with it to make 100? Check on the AL Abacus)	Numeral cards 1-100, AL Abacus
<input type="checkbox"/> Make 1000 (Roll 3 place value dice. Read the number. What goes with it to make 1000?)	Place value dice
<input type="checkbox"/> Verbal or written tasks (bare numbers or situational problems with combinations to 100 and beyond)	NOTE: Students can solve problems with larger numbers. We are working for efficiency and flexibility (initially jump, split, compensation, etc.).

Wright, R., Ellemor-Collins, D., Tabor, P. (2012). *Developing Number Knowledge*: SAGE Publications.

Wright, R., Stanger, G., Stafford, A., & Martland, J. (2015). *Teaching Number in the Classroom with 4-8 Year Olds Second Edition*: SAGE Publications.

Note: Students who are Structuring Level 5 should be working on combining and partitioning larger numbers in order to become more efficient and flexible with multi-digit addition and subtraction. Initially they may partition numbers into place value components, determine how many to the next or previous decuple, etc. Being able to quickly partition numbers in a variety of ways paves the ways for greater efficiency, accuracy, and flexibility with multi-digit operations.

Another option for Students at Structuring Level 5: structuring to 1 with fractions and decimals.