Kentucky Numeracy Project Instructional Resources Numeracy Progressions

Numeracy Targets and Colors for each Strand and Level

Forward counting* Nf	Nf__.0 Rote counting 1 to 5	Nf__.1 Rote counting 1 to 10	Nf__.2 Emerging forward counting from any number within 10	Nf__.3 Facile forward counting from any number within 10	Nf__.4 Facile forward counting from any number within 30	Nf__.5 Facile forward counting from any number within 100	Nf__.6 Facile forward counting from any number within 1,000
Backward counting* Nb	Nb__.0 Rote counting backward 5 to 1	Nb__.1 Rote counting backward 10 to 1	Nb__.2 Emerging backward counting from any number within 10	Nb__.3 Facile backward counting from any number within 10	Nb__.4 Facile backward counting from any number within 30	Nb__.5 Facile backward counting from any number within 100	Nb__.6 Facile backward counting from any number within 1,000
Numeral Identification* Ni	Ni__.0 Identify numerals to 1 to 5	Ni__.1 Identify numerals 0 to 10	Ni__.2 Identify numerals 0 to 20	Ni__.3 Identify numerals 0 to 100	Ni__.4 Identify numerals 0 to 1,000	Ni__.5 Identify numerals 0 to 1,000,000	
Addition & Subtraction* A	A__.0 Count visible items to 20	A__.1 Add or subtract using items (direct modeling)	A__.2 Add by counting from 1 (no visible items)	A__.3 Add by counting on; subtract by counting back	A__.4 Relate addition and subtraction	A__.5 Add and subtract using a range of composite strategies	A__.6 Extending and refining strategies for +/-
Structuring* S	S__.0 Subitize quantities to 6	S__.1 Facile structures to 5	S__.2 Intermediate structures to 10	S__.3 Facile structures to 10	S__.4 Intermediate structures to 20	S__.5 Facile structures to 20	

*Indicated strands align to Add+Vantage MR® (AVMR) Contructs and Levels.

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Numeracy Targets and Colors for each Strand and Level

Base Ten Arithmetical Strategies* T	T__.0 Emerging understanding that 2-digit numbers are composed of tens and ones	T__.1 Solve 2-digit +/- with materials by counting by 10s OR by 1s	T__.2 Solve 2-digit +/- with materials using strategies based on place value	T__.3 Beginning to solve 2-digit +/- without materials using strategies based on place value	T__.4 Solve 2-digit +/- without materials using a range of strategies	T__.5 Solve 3-digit +/- without materials using a variety of strategies	T__.6 Extending and refining efficient strategies for multi-digit +/-
Multiplication and Division* M	M__.0 No activities at the level	M__.1 Build and share items into equal groups	M__.2 Count equal groups using stress or skip counting	M__.3 Count items arranged in equal groups with only group markers visible (items within groups are not visible)	M__.4 Multiply and divide within 100 using counting strategies	M__.5 Multiply and divide within 100 using a range of strategies	M__.6 Extend and refine efficient strategies for multiplication & division
Fractions F	F__.0 Whole number foundations; introduce manipulative	F__.1 Emerging partitioning (e.g. partitioning to create halves, thirds, etc.)	F__.2 Facile partitioning (e.g. verifying a shape has been partitioned into fourths or eighths)	F__.3 Beginning to understand a fraction as a measure, i.e. interpret $\frac{3}{4}$ as the size of 3 one-fourth pieces.	F__.4 Understand a fraction as a measure	F__.5 Comparing fractions	F__.6 Extend and refine fraction understandings

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Using Numeracy Progressions

KNP activities are organized into Task Groups, a set of 4-7 related activities aligned to a numeracy progression. All activities within a task group share the same 4 digit number task group ID number. The prefix indicates the instructional strand, and the suffix, indicates the level of the activity. Within a strand, all activities with the same level will also be the same color and comparable in complexity. The example below shows the progression of one task group in the Structuring Strand.

Activity ID #	Color	Activity Name	Mathematical Task
S 2211.0	Yellow	Pyramid (Match to 5)	Students match cards representing the same amount within 5. Cards available include dot patterns, 5 frames, finger patterns, numeral, and word cards.
S 2211.1	Red	Pyramid (Make 5)	Students match two cards with a sum of 5. Cards available include dot patterns, 5 frames, finger patterns, numeral, and word cards.
S 2211.2	Blue	Pyramid (Make 10, 10 frames)	Students match two cards with a sum of 10. Cards available include both a numeral and ten frame representation.
S 2211.3	Green	Pyramid (Make 10, numeral cards)	Students match two numeral cards with a sum of 10.
S 2211.4	Purple	Pyramid (Make 20, double 10 frames)	Students match two cards with a sum of 20. Cards available include both a numeral and double ten frame representation.
S 2211.5	Pink	Pyramid (Make 20, numeral cards)	Students match two numeral cards with a sum of 20.
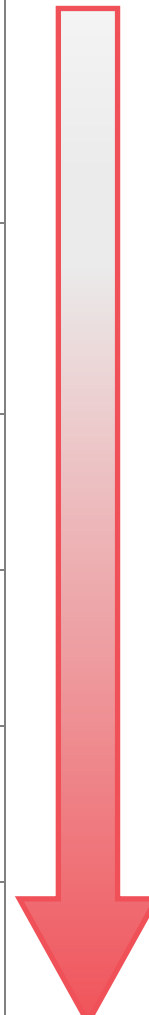
As the level number increases, activities increase in complexity.

In this example, note the increasing number range and choice of materials.