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| | <p>whole number relationships, including grouping in tens and ones</p> <ul style="list-style-type: none"> - Develop understanding of base-ten numeration system and place-value concepts - Develop fluency with addition facts and related subtraction facts up to 20 (Automaticity up to 10) | <p>Computation:</p> <ul style="list-style-type: none"> ● Addition and Subtraction to 20 ● Addition and Subtraction Applying Understanding of Groups of Tens | | <ul style="list-style-type: none"> • STAR Math • FastBridge • easyCBM • Dibels • mClass |
| | | <p>Application:</p> <ul style="list-style-type: none"> ● Place Value ● Computation Application | Diagnostic | <ul style="list-style-type: none"> • STAR Math • Key Math 3 |
| Grade 2 | <p>Numbers and Operations</p> <ul style="list-style-type: none"> - Develop understanding of whole number relationships, including grouping in hundreds, tens, and ones - Develop understanding of base-ten numeration system and place-value concepts up to 1000 - Develop fluency with addition facts and related subtraction facts (automaticity up to 20) - Develop fluency with multi-digit addition and subtraction <p>Measurement</p> <ul style="list-style-type: none"> - Measurement and estimation w/standard units | <p>Computation:</p> <ul style="list-style-type: none"> ● Addition and subtraction facts to 100 | Screening and progress monitoring | <ul style="list-style-type: none"> • AIMSweb • Monitoring Basic Skills Progress • STAR Math • FastBridge • easyCBM • Dibels • mClass |
| | | <p>Concepts and Application:</p> <ul style="list-style-type: none"> ● Place value ● Measurement with Standard Units ● Computation Application | Diagnostic | <ul style="list-style-type: none"> • STAR Math • Key Math 3 |
| Grade 3 | <p>Numbers and Operations</p> <ul style="list-style-type: none"> - Develop understandings of multiplication and division - Develop fluency with multiplication and division facts up to 100 - Develop understandings of fractions as numbers (both area and linear representations) <p>Measurement</p> <ul style="list-style-type: none"> - Develop understanding of area and its relation to multiplication and addition - Measure and estimate time, | <p>Computation:</p> <ul style="list-style-type: none"> ● Multiplication and division facts up to 100 ● Addition and subtraction facts up to 1000 | Screening and progress monitoring | <ul style="list-style-type: none"> • AIMSweb • Monitoring Basic Skills Progress • STAR Math • FastBridge • easyCBM • Dibels • mClass |
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| | liquid volume, and masses of objects using standard units | <p>Concepts and Application:</p> <ul style="list-style-type: none"> ● Equivalence and ordering with common fractions (common denominators or basic fractions like a half, third, fourth, etc.) ● Measurement with time, volume, and mass ● Area with relation to multiplication and addition ● Application of Computation | Diagnostic | |
| Grade 4 | <p>Numbers and Operations</p> <ul style="list-style-type: none"> - Utilize understanding of place-value and operations to perform multi-digit arithmetic - Identify, represent, and compare common fractions and decimals - Develop understanding of basic fraction addition/subtraction (like denominators) and multiplication with integers ($5 \times \frac{1}{7} = \frac{5}{7}$) - Generalize place value of whole numbers | <p>Computation:</p> <ul style="list-style-type: none"> ● Multi Digit Arithmetic ● Addition and subtraction with common denominators ● Multiplication of integers with fractions <p>Concepts and Application:</p> <ul style="list-style-type: none"> ● Equivalence and Ordering with Fractions and Decimals ● Application of Computation | <p>Screening and progress monitoring</p> <p>Diagnostic</p> | <ul style="list-style-type: none"> • AIMSweb • Monitoring Basic Skills Progress • STAR Math • FastBridge • easyCBM • Dibels • STAR Math • Key Math 3 |
| Grade 5 | <p>Numbers and Operations</p> <ul style="list-style-type: none"> - Complete understanding of the place value system - Develop understanding of and fluency with addition, subtraction, and multiplication of fractions - Develop understanding of and fluency with division of a whole number by a unit fraction - Develop understanding and fluency with | <p>Computation:</p> <ul style="list-style-type: none"> ● Multi Digit Arithmetic ● Fraction Addition, Subtraction, and Multiplications ● Division of whole Numbers by Unit Fractions ● Arithmetic with Decimals (up to hundredths) ● Simplifying Fractions | <p>Screening and progress monitoring</p> <p>Diagnostic</p> | <ul style="list-style-type: none"> • AIMSweb • Monitoring Basic Skills Progress • STAR Math • FastBridge • easyCBM • Dibels • STAR Math • Key Math 3 |

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| | <p>operations of decimals up to the hundredths</p> <p>Measurement</p> <ul style="list-style-type: none"> - Develop understanding of volume and its relation to multiplication and addition <p>Geometry</p> <ul style="list-style-type: none"> - Analyze properties and classify 2-D shapes | <p>Concepts and Application:</p> <ul style="list-style-type: none"> ● Place Value ● Volume and its relation to addition and multiplication ● 2 Dimensional Shape Classification ● Equivalent Fractions ● Application of computation | | |
| Grade 6 | <p>The Number System</p> <ul style="list-style-type: none"> - Apply and extend previous understandings of multiplication and division to divide fractions by fractions - Extend number system understanding to all rational numbers, including negatives <p>Ratios/Proportional Reasoning</p> <ul style="list-style-type: none"> - Develop understanding of percent, ratio, and rate. <p>Expressions and Equations</p> <ul style="list-style-type: none"> - Apply and extend understanding of arithmetic to algebraic expressions - Reason about and solve single variable equations and inequalities - Represent and analyze relationships between dependent and independent variables | <p>Computation:</p> <ul style="list-style-type: none"> ● Division of fractions by fractions ● Single variable expressions and equations <p>Concepts and Application:</p> <ul style="list-style-type: none"> ● Application of ratio and rate problems ● Ratios, rates, percent, and fraction conversion ● Negative number application (as well as negative $-(-2)=2$) ● Single variable expressions, equations, and inequalities ● Independent and dependent variable relationships ● Application of computation | <p>Screening and progress monitoring</p> <p>Diagnostic</p> | <ul style="list-style-type: none"> • AIMSweb • Monitoring Basic Skills Progress • STAR Math • FastBridge • easyCBM • Dibels • STAR Math • Key Math 3 |
| Grades 7 | <p>The Number System</p> <ul style="list-style-type: none"> - Develop understanding of and fluency with addition, subtraction, multiplication, and division of all rational numbers <p>Ratios/Proportional Reasoning</p> <ul style="list-style-type: none"> - Solve problems with proportional | <p>Computation:</p> <ul style="list-style-type: none"> ● All operations with rational numbers ● Equivalent expressions ● Single variable equations | <p>Screening and progress monitoring</p> <p>Diagnostic</p> | <ul style="list-style-type: none"> • AIMSweb • STAR Math • FastBridge • easyCBM • STAR Math • Key Math 3 |

Resources:

Content Emphasis By Cluster K-8. (n.d.) Retrieved June 29, 2016, from <http://community.ksde.org/Default.aspx?tabid=5276>

National Council of Teachers of Mathematics. (2000). *Principles and standards for school mathematics*. Reston, VA: author.

National Mathematics Advisory Panel. (2008). *Foundations for Success: The Final Report of the National Mathematics Advisory Panel*. Washington, DC: U.S. Department of Education

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