# Learning Continuum - Test View

MAP: Math 2-5 Common Core 2010 V2

<u>Print</u>

# **Goal: Operations and Algebraic Thinking**

161-170	171-180	181-190
Reinforce	Develop	Introduce
these skills & concepts	these skills & concepts	these skills & concepts
	Number Sentences/Equations/Equivalence	
Decomposes whole numbers within 10 in more than one way     Determines start or change unknown in subtraction equations with whole numbers within 20     Determines unknown parts in addition equations with whole numbers, sums within 20	Decomposes whole numbers within 10 in more than one way     Determines start or change unknown in subtraction equations with whole numbers within 20     Determines unknown factors in multiplication equations with whole numbers and products within 100     Determines unknown parts in addition equations with whole numbers, sums within 20	Decomposes whole numbers within 10 in more than one way     Determines start or change unknown in subtraction equations with whole numbers within 20     Determines unknown factors in multiplication equations with whole numbers and products within 100     Determines unknown parts in addition equations with whole numbers, sums within 20     Represents division equations with whole numbers as part-unknown multiplication equations     Represents subtraction equations with whole numbers as part-unknown addition equations
	Numerical Expressions	
	Evaluates numerical expressions	Evaluates numerical expressions

	whole numbers and parentheses	whole numbers and parentheses
ı	Properties and Relationships of Operations	3
	Applies the commutative property of multiplication to whole numbers     Identifies the missing equation in whole-number addition or subtraction fact families     Understands the inverse relationship between addition and subtraction	Identifies the missing equation in whole-number addition or subtraction fact families     Represents division equations with whole numbers as part-unknown multiplication equations     Represents multiplication as repeated addition     Represents subtraction equations with whole numbers as part-unknown addition equations     Understands the inverse relationship between addition and subtraction
Who	le Numbers and Decimals: Rounding/Estim	ation
	Estimates solutions to multi-step word problems involving the four operations with whole numbers	Estimates solutions to multi-step word problems involving the four operations with whole numbers
	Whole Numbers: Addition/Subtraction	
<ul> <li>Adds three or more whole numbers with sums within 20</li> <li>Adds whole numbers with sums within 20</li> <li>Subtracts whole numbers within 20</li> </ul>	Adds three or more whole numbers with sums within 20     Subtracts whole numbers within 20	Adds three or more whole numbers with sums within 20
	Whole Numbers: Concepts/Properties	
	Determines if sets of objects are even or odd	Determines if sets of objects are even or odd
	Whole Numbers: Multiplication/Division	
<ul><li> Multiplies basic facts</li><li> Represents multiplication using models</li></ul>	<ul><li> Multiplies basic facts</li><li> Represents multiplication using models</li></ul>	<ul><li>Divides basic facts</li><li>Multiplies basic facts</li><li>Represents multiplication using models</li></ul>
Whole Numbers: Place Value		
Decomposes numbers to make 10 as a strategy for addition or subtraction	Decomposes numbers to make 10 as a strategy for addition or subtraction	Decomposes numbers to make 10 as a strategy for addition or subtraction
Whole Numbers: Represent and Solve Word Problems		
Represents addition word problems involving three addends with expressions or equations, whole numbers within 20 Represents one-step addition and subtraction word problems with expressions or equations, whole numbers within 20 Represents one-step addition and	Estimates solutions to multi-step word problems involving the four operations with whole numbers     Represents one-step addition and subtraction word problems with expressions or equations, whole numbers within 20     Represents one-step addition and subtraction word problems with objects,	Estimates solutions to multi-step word problems involving the four operations with whole numbers     Represents multi-step word problems with expressions or equations, whole numbers     Represents one-step addition and subtraction word problems with

subtraction word problems with objects, whole numbers within 20

- Solves one-step put-together word problems with result unknown, whole numbers within 100
- Solves one-step put-together word problems with result unknown, whole numbers within 20
- Solves one-step take-apart word problems with result unknown, whole numbers within 20

whole numbers within 20

- Represents one-step equal-groups multiplication and division word problems with models, whole numbers
- Solves multi-step addition and subtraction word problems, whole numbers within 100
- Solves one-step additive-comparison word problems, whole numbers within 100
- Solves one-step additive-comparison word problems, whole numbers within 20
- Solves one-step equal-groups division word problems, whole numbers within 100
- Solves one-step equal-groups multiplication word problems, whole numbers with products within 100
- Solves one-step put-together word problems with result unknown, whole numbers within 100
- Solves one-step put-together word problems with result unknown, whole numbers within 20
- Solves one-step put-together word problems with start, change, or part unknown, whole numbers within 20
- Solves one-step take-apart word problems with result unknown, whole numbers within 100
- Solves one-step take-apart word problems with result unknown, whole numbers within 20
- Solves one-step take-apart word problems with start, change, or part unknown, whole numbers within 20
- Solves put-together word problems involving three addends, whole numbers within 20

expressions or equations, whole numbers within 20

- Represents one-step equal-groups multiplication and division word problems with models, whole numbers
- Represents one-step equal-groups multiplication word problems as expressions or equations, whole numbers
- Represents one-step multiplicative-comparison word problems as expressions or equations, whole numbers
- Solves multi-step addition and subtraction word problems, whole numbers within 100
- Solves multi-step word problems involving the four operations with whole numbers
- Solves one-step additive-comparison word problems, whole numbers within 100
- Solves one-step additive-comparison word problems, whole numbers within 20
- Solves one-step equal-groups division word problems, whole numbers within 100
- Solves one-step equal-groups multiplication word problems, whole numbers with products within 100
- Solves one-step put-together word problems with result unknown, whole numbers within 100
- Solves one-step put-together word problems with result unknown, whole numbers within 20
- Solves one-step put-together word problems with start, change, or part unknown, whole numbers within 100
- Solves one-step put-together word problems with start, change, or part unknown, whole numbers within 20
- Solves one-step take-apart word problems with result unknown, whole numbers within 100
- Solves one-step take-apart word problems with result unknown, whole numbers within 20
- Solves one-step take-apart word problems with start, change, or part unknown, whole numbers within 100
- Solves one-step take-apart word problems with start, change, or part unknown, whole numbers within 20
- Solves put-together word problems involving three addends, whole numbers within 20

Sub-goal: Analyze Patterns and Relationships

161-170 171-180 181-190

Reinforce Develop Introduce these skills & concepts these skills & concepts concepts

Goal: Number and Operations

161-170	171-180	181-190
Reinforce these skills & concepts	<b>Develop</b> these skills & concepts	Introduce these skills & concepts
	Number Sentences/Equations/Equivalence	Ð
	Composes or decomposes whole numbers to create equivalent expressions	Composes or decomposes whole numbers to create equivalent expressions
Who	ole Numbers and Decimals: Rounding/Estim	nation
	Rounds whole numbers within 100	Rounds whole numbers within 1,000     Rounds whole numbers within 100
	Whole Numbers: Compare/Order	
	Compares sets of objects within 10 using terms Compares whole numbers within 1,000 using symbols Compares whole numbers within 1,000 using terms Compares whole numbers within 10,000 using symbols Compares whole numbers within 100 using symbols	Compares sets of objects within 10 using terms Compares whole numbers within 1,000 using symbols Compares whole numbers within 10,000 using symbols Compares whole numbers within 100 using symbols
	Whole Numbers: Counting and Cardinality	1
Counts backward by 100s within 1,000 Counts by 100s within 1,000 Counts by 10s within 1,000 Counts by 10s within 100 Counts by 1s within 1,000 Counts by 1s within 100 Represents a given set of grouped objects as a numeral within 100 Represents a given set of objects as a numeral within 20	<ul> <li>Counts backward by 100s within 1,000</li> <li>Counts by 100s within 1,000</li> <li>Counts by 10s within 1,000</li> <li>Counts by 10s within 100</li> <li>Counts by 5s within 100</li> </ul>	<ul> <li>Counts backward by 100s within 1,000</li> <li>Counts by 100s within 1,000</li> <li>Counts by 5s within 100</li> </ul>
	Whole Numbers: Place Value	
Reads and writes whole numbers within 1,000 as hundreds, tens, and ones Reads and writes whole numbers within 1,000 in word form Reads and writes whole numbers within 100 in word form Reads and writes whole numbers within 20 in word form Represents whole numbers within 1,000 with models Represents whole numbers within 100 with models Represents whole numbers within 20 with models Understands the value of a digit in whole numbers within 1,000	Identifies the number of tens and ones in a model Reads and writes whole numbers within 1,000 as hundreds, tens, and ones Reads and writes whole numbers within 1,000 in expanded form Reads and writes whole numbers within 1,000 in word form Reads and writes whole numbers within 1,000,000 in word form Reads and writes whole numbers within 10,000 in expanded form Reads and writes whole numbers within 10,000 in word form Reads and writes whole numbers within 10,000 in word form Reads and writes whole numbers within 10,000 in word form	Identifies the number of tens and ones in a model Reads and writes whole numbers within 1,000 as hundreds, tens, and ones Reads and writes whole numbers within 1,000 in expanded form Reads and writes whole numbers within 1,000 in word form Reads and writes whole numbers within 1,000,000 in word form Reads and writes whole numbers within 10,000 in expanded form Reads and writes whole numbers within 10,000 in expanded form Reads and writes whole numbers within 100 as tens and ones Reads and writes whole numbers within 100,000 in word form

100 in expanded form

- Reads and writes whole numbers within 100 in word form
- Reads and writes whole numbers within 20 as tens and ones
- Represents whole numbers within 1,000 with models
- Represents whole numbers within 100 with models
- Understands the value of a digit in whole numbers within 1,000
- Understands the value of a digit in whole numbers within 1,000,000

with models

- Understands the value of a digit in whole numbers greater than 1,000,000
- Understands the value of a digit in whole numbers within 1,000
- Understands the value of a digit in whole numbers within 1,000,000

# Sub-goal: Number and Operations in Base Ten

161-170

171-180

181-190

### Reinforce

these skills & concepts

### Develop

these skills & concepts

### Introduce

these skills & concepts

### Decimals: Addition/Subtraction

- Adds and subtracts decimals with the same number of digits after the decimal point
- Adds and subtracts decimals with the same number of digits after the decimal point
- Adds and subtracts decimals with the same number of digits after the decimal point

### **Decimals: Represent and Solve Word Problems**

- Solves one-step word problems involving addition and subtraction of decimals with the same number of digits after the decimal point, including contexts involving money
- Solves one-step word problems involving addition and subtraction of decimals with the same number of digits after the decimal point, including contexts involving money
- Solves one-step word problems involving multiplication of whole numbers and decimals to the hundredths, including contexts involving money

### Number Sentences/Equations/Equivalence

- Composes or decomposes whole numbers to create equivalent expressions
- Composes or decomposes whole numbers to create equivalent expressions

### **Properties and Relationships of Operations**

- Understands the inverse relationship between addition and subtraction
- Understands the inverse relationship between addition and subtraction

### Whole Numbers: Addition/Subtraction

- Adds three or more whole numbers with sums within 100
- Adds whole numbers with sums within 1,000, no regrouping
- Adds whole numbers with sums within 100, no regrouping
- Adds whole numbers with sums within 100, with regrouping
- Subtracts multiples of 10 from multiples of 10 within 100
- Adds three or more whole numbers with sums within 100
- Adds whole numbers with sums greater than 10.000
- Adds whole numbers with sums within 1,000, no regrouping
- Adds whole numbers with sums within 1,000, with regrouping
- Adds whole numbers with sums within 100 using models
- Adds three or more whole numbers with sums greater than 100
- Adds whole numbers with sums greater than 10,000
- Adds whole numbers with sums within 1,000, with regrouping
- Adds whole numbers with sums within 100 using models
- Subtracts whole numbers greater than 1,000

	Adds whole numbers with sums within 100, no regrouping Adds whole numbers with sums within 100, with regrouping Identifies a number 10 more than a given number using models Subtracts multiples of 10 from multiples of 10 within 100 Subtracts whole numbers within 1,000, no regrouping Subtracts whole numbers within 100, no regrouping Whole Numbers: Multiplication/Division	Subtracts whole numbers within 1,000, no regrouping     Subtracts whole numbers within 1,000, with regrouping     Subtracts whole numbers within 100 using models     Subtracts whole numbers within 100, no regrouping     Subtracts whole numbers within 100, with regrouping
	Whole Numbers. Multiplication/bivision	
Multiplies one-digit whole numbers by multiples of 10 using models		<ul> <li>Multiplies one-digit whole numbers by multiples of 10</li> <li>Multiplies one-digit whole numbers by two-digit whole numbers</li> <li>Multiplies two-digit whole numbers by two-digit whole numbers</li> </ul>
	Whole Numbers: Place Value	
Subtracts multiples of 10 from multiples of 10 within 100	Subtracts multiples of 10 from multiples of 10 within 100	

161-170	171-180	181-190
Reinforce	Develop	Introduce
these skills & concepts	these skills & concepts	these skills & concepts
	Fractions: Addition/Subtraction	
		Adds and subtracts whole numbers, fractions, and/or mixed numbers with lik denominators, no regrouping
	Fractions: Compare/Order	
	Compares fraction models with unlike numerators and denominators using words     Orders fraction models with unlike numerators and/or denominators	Compares fraction models with like numerators or denominators using word     Compares fraction models with unlike numerators and denominators using words
	Fractions: Equivalence	
Identifies fractions equivalent to whole numbers using area or set models	Identifies equivalent fraction models     Identifies fractions equivalent to whole numbers using area or set models	Identifies equivalent fraction models     Identifies fractions equivalent to wholenumbers using area or set models
	Fractions: Represent/Model	
	Models non-unit fractions using area models     Models unit fractions using area models	<ul> <li>Models non-unit fractions using area models</li> <li>Models unit fractions using area mod</li> </ul>

161-170	171-180	181-190
Reinforce these skills & concepts	<b>Develop</b> these skills & concepts	Introduce these skills & concepts
	Angle Measurement	
<ul> <li>Measures angles using a protractor</li> </ul>	Measures angles using a protractor	<ul> <li>Compares angle measures to benchmark angles</li> <li>Measures angles using a protractor</li> <li>Solves one-step word problems involving angles</li> </ul>
	Area	
Determines areas of figures composed of whole unit squares	Determines areas of figures composed of whole unit squares	Determines areas of figures compose of whole unit squares
	Conversion of Units	
	Completes simple conversions of units of time	Completes complex conversions of more than two units of time     Completes simple conversions of customary units of length     Completes simple conversions of unit of time
	Length	
<ul> <li>Knows the appropriate customary unit or tool to measure length</li> <li>Measures length, width, or height to the nearest centimeter</li> <li>Measures length, width, or height to the nearest inch</li> </ul>	<ul> <li>Compares lengths of objects using nonstandard units</li> <li>Knows the appropriate customary unit or tool to measure length</li> <li>Measures length, width, or height to the nearest half inch</li> </ul>	Completes simple conversions of customary units of length     Knows the appropriate customary unit tool to measure length     Understands that the measurement of an object will change depending upon the units used to measure it.
	Money	
Determines the whole number value of a collection of coins given as pictures	Determines equivalent coin values     Determines the decimal value of a collection of coins and/or bills by counting on     Determines the whole number value of a collection of coins given as pictures	Determines equivalent coin values     Determines the decimal value of a collection of coins and/or bills by countin on     Determines the whole number value of collection of coins given as coin names     Determines the whole number value of collection of coins given as pictures     Solves money word problems involving coins
	Perimeter/Circumference	
	Determines perimeters of basic polygons	Determines perimeters of basic

Problem Solving with Unite

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- Solves one-step length word problems involving addition or subtraction
- Solves one-step money word problems involving whole number addition or subtraction
- Solves elapsed-time word problems across either minutes or hours
- Solves one-step length word problems involving addition or subtraction
- Solves one-step money word problems involving whole number addition or subtraction
- Solves elapsed-time word problems across either minutes or hours
- Solves money word problems involving coins
- Solves multi-step money word problems involving whole numbers
- Solves one-step capacity word problems involving whole number multiplication or division
- Solves one-step length word problems involving addition or subtraction
- Solves one-step money word problems involving whole number addition or subtraction
- Solves one-step money word problems involving whole number multiplication or division

#### Time

- Reads analog clocks to the nearest half hour
- Reads analog clocks to the nearest hour
- Completes simple conversions of units of time
- Reads analog clocks to the nearest five minutes
- Reads analog clocks to the nearest half hour
- Reads analog clocks to the nearest minute
- Solves elapsed-time word problems across either minutes or hours
- Understands time interval concepts: quarter to, half past, etc.

- Completes complex conversions of more than two units of time
- Completes simple conversions of units of time
- Determines elapsed time across either minutes or hours using clocks
- Reads analog clocks to the nearest five minutes
- Reads analog clocks to the nearest half hour
- Reads analog clocks to the nearest minute
- Solves elapsed-time word problems across either minutes or hours
- · Understands A.M. and P.M.
- Understands time interval concepts: quarter to, half past, etc.

### Sub-goal: Represent and Interpret Data

161-170

### Reinforce

these skills & concepts

# 171-180

**Develop** these skills & concepts

### 181-190

### Introduce

these skills & concepts

### Data Analysis

- Adds and subtracts to answer questions about pictographs with single-unit scales
- Compares categories in bar graphs with multi-unit scales
- Compares categories in bar graphs with single-unit scales
- Compares categories in pictographs with multi-unit scales
- Compares categories in pictographs with single-unit scales
- Reads bar graphs with multi-unit scales to determine how many in a category
- Reads bar graphs with single-unit scales to determine how many in a category
- · Reads data in tables or charts

- Adds and subtracts to answer questions about bar graphs with single-unit scales
- Adds and subtracts to answer questions about pictographs with single-unit scales
- Compares categories in bar graphs with multi-unit scales
- Compares categories in bar graphs with single-unit scales
- Compares categories in pictographs with multi-unit scales
- Compares categories in pictographs with single-unit scales
- Reads bar graphs with multi-unit scales to determine how many in a category
- · Reads bar graphs with single-unit scales

- Adds and subtracts to answer questions about bar graphs with multi-unit scales
- Adds and subtracts to answer questions about bar graphs with single-unit scales
- Adds and subtracts to answer questions about pictographs with single-unit scales
- Compares categories in bar graphs with multi-unit scales
- Compares categories in bar graphs with single-unit scales
- Compares categories in pictographs with single-unit scales
- Counts sets of objects by category
- Reads bar graphs with multi-unit scales to determine how many in a category

· Reads pictographs with single-unit scales to determine how many in a category

to determine how many in a category

- · Reads data in tables or charts
- · Reads bar graphs with single-unit scales to determine how many in a category
- · Reads data in tables or charts
- · Reads pictographs with multi-unit scales to determine how many in a category

### **Data Representation**

- · Represents data in bar graphs with multi-unit scales
- · Represents data in picture graphs with single-unit scales
- · Represents data in bar graphs with multi-unit scales
- · Represents data in bar graphs with single-unit scales
- · Represents data in picture graphs with single-unit scales
- · Represents data in bar graphs with multi-unit scales
- · Represents data in bar graphs with single-unit scales
- · Represents data in pictographs with single-unit scales
- · Represents data in picture graphs with single-unit scales
- · Represents data in tables or charts

Goal: Geometry Sub-goal: Reason with Shapes, Attributes, & Coordinate Plane 171-180 181-190 161-170 Reinforce Introduce Develop these skills & concepts these skills & concepts these skills & concepts **Angle Measurement** · Compares angle measures to benchmark angles **Coordinate Geometry** · Plots the coordinates of points in the first · Interprets points with whole number quadrant of a coordinate plane coordinates in the first quadrant within the given context · Plots the coordinates of points in the first quadrant of a coordinate plane Fractions: Represent/Model · Identifies shapes that are divided into · Identifies shapes that are divided into · Identifies shapes that are divided into equal parts equal parts equal parts · Identifies shapes that are divided into · Identifies shapes that are divided into · Identifies shapes that are divided into fourths fourths fourths · Identifies shapes that are divided into · Identifies shapes that are divided into halves halves · Identifies shapes that are divided into

## Identification and Classification of 2-D Shapes

· Classifies shapes as open or closed

thirds

- · Identifies and names nonbasic shapes, such as trapezoids, hexagons, etc.
- · Identifies and names triangles, squares, rectangles, and circles
- · Identifies the number of sides or corners of 2-D shapes
- Knows definitions of a triangle, a square,
- · Classifies 2-D shapes by properties
- · Composes or decomposes 2-D shapes to form new shapes
- · Identifies and names nonbasic shapes, such as trapezoids, hexagons, etc.
- · Identifies and names triangles, squares, rectangles, and circles
- · Identifies the number of sides or corners
- · Classifies 2-D shapes by properties
- · Classifies shapes as flat/2-D
- · Composes or decomposes 2-D shapes to form new shapes
- · Identifies and names nonbasic shapes, such as trapezoids, hexagons, etc.
- · Identifies the number of sides or corners of 2-D shapes

a rectangle, and a circle	<ul><li>of 2-D shapes</li><li>Knows definitions of a triangle, a square, a rectangle, and a circle</li></ul>	<ul> <li>Knows definitions of a triangle, a square a rectangle, and a circle</li> </ul>
ı	dentification and Classification of 3-D Shap	es
<ul> <li>Identifies and names cubes, cones, cylinders, and spheres</li> <li>Identifies and names the 3-D shape of real-world objects</li> </ul>	<ul> <li>Identifies and names cubes, cones, cylinders, and spheres</li> <li>Identifies and names the 3-D shape of real-world objects</li> <li>Identifies the number of faces, edges, or vertices for a 3-D object</li> </ul>	<ul> <li>Identifies and names cubes, cones, cylinders, and spheres</li> <li>Identifies and names the 3-D shape of real-world objects</li> <li>Identifies the number of faces, edges, covertices for a 3-D object</li> </ul>
	Points, Lines, Segments, Rays, and Angles	
		Identifies acute, obtuse, or right angles     Identifies parallel lines involving real-world objects
	Spatial Concepts and Symmetry	
<ul> <li>Recognizes lines of symmetry in 2-D figures</li> <li>Understands location words</li> </ul>	Composes or decomposes 2-D shapes to form new shapes Identifies 2-D figures which have line symmetry Recognizes lines of symmetry in 2-D figures Understands location words	Composes or decomposes 2-D shapes to form new shapes Determines the number of lines of symmetry in 2-D figures Identifies 2-D figures which have line symmetry Recognizes lines of symmetry in 2-D figures

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