

Math in Focus © 2009
Textbook Alignment
to the
Utah Core
2nd Grade Mathematics



 HOUGHTON MIFFLIN HARCOURT
Supplemental Publishers

To contact your Great Source Representative,
Call: 800-289-4490, option 4

www.greatsource.com

Textbook Alignment to the Utah Core – 2nd Grade Mathematics

This alignment has been completed using an “Independent Alignment Vendor” from the USOE approved list (www.schools.utah.gov/curr/imc/indvendor.html.) Yes No

Name of Company and Individual Conducting Alignment: Standard Media Services, LLC; David A. Johnson

A “Credential Sheet” has been completed on the above company/evaluator and is (Please check one of the following):

On record with the USOE.

The “Credential Sheet” is attached to this alignment.

Instructional Materials Evaluation Criteria (name and grade of the core document used to align): **2nd Grade Mathematics Core Curriculum**

Title: Math in Focus ©2009 Grade 2 Student Book A ISBN#: 978-0-669-01112-8

Title: Math in Focus ©2009 Grade 2 Workbook A ISBN#: 978-0-669-01327-6

Title: Math in Focus ©2009 Grade 2 Student Book B ISBN#: 978-0-669-01102-9

Title: Math in Focus ©2009 Grade 2 Workbook B ISBN#: 978-0-669-01334-4

Publisher: Houghton Mifflin Harcourt Supplemental Publishers Inc.

Overall percentage of coverage in the *Student Edition (SE) and Teacher Edition (TE)* of the Utah State Core Curriculum: 92 %

Overall percentage of coverage in *ancillary materials* of the Utah Core Curriculum: _____ %

STANDARD I: Students will acquire number sense with whole numbers and fractions and perform operations with whole numbers.

Percentage of coverage in the *student and teacher edition* for Standard I: 94 %

Percentage of coverage not in student or teacher edition, but covered in the *ancillary material* for Standard I: _____ %

OBJECTIVES & INDICATORS		Coverage in Student Edition(SE) and Teacher Edition (TE) (pg #'s, etc.)	Coverage in Ancillary Material (titles, pg #'s, etc.)	Not covered in TE, SE or ancillaries ✓
Objective 1.1: Identify and represent the relationships among numbers, quantities, and place value in whole numbers up to 1000.				
a.	Represent whole numbers in groups of hundreds, tens, and ones using base ten models and write the numeral representing the set in standard and expanded form.	Gr2 Student Bk A: 2-5, 6-10, 11-17, 18-23, 24-28, 33, 38-41, 42-43, 46-48, 49-51, 61-63, 67-68, 71, 72-75, 78-82, 84-87, 90-91 Gr2 Wbk A: 1-6, 7-12, 21-22, 25, 31, 35, 39, 45, 49, 53, 57, 61, 65, 69, 99, 245-246		
b.	Identify the place and the value of a given digit in a three-digit numeral.	Gr2 Student Bk A: 1, 6-10, 11-17, 18-23, 24-33, 46-47, 49-53, 55, 61-64, 66, 67-69, 71, 72-75, 77, 78-83, 84-88, 90-91 Gr2 Wbk A: 1-2, 7-12, 13-14, 21-23, 25-26, 31, 35, 39, 43, 45, 49, 53, 57, 61, 65, 69, 99, 245-246, 249		
c.	Represent the composition and decomposition of numbers in a variety of ways.	Gr2 Student Bk A: 2-5, 6-10, 11-17, 18-23, 35, 42-44, 46-47, 49-53, 55, 61-64, 67-69, 71, 72-75, 77, 78-83, 84-89, 92, 96-102, 103-108, 109-114, 115-121, 124-126, 127-133, 134-141, 142-147, 153-161, 162-167, 168-171, 173-178, 179-182, 216-219, 232-234, 253-254, 256-258, 278-280 Gr2 Wbk A: 73-76, 77-80, 81-84, 85-94, 95-98, 102-106, 107-108, 109-110, 111-114, 115-118, 120-126, 129-132, 133-136, 137-140, 141-144, 147, 152, 158-164, 174,		

		238-239, 245-246, 252		
d.	Compare and order numbers using the terms, greater than, less than, or equal to, and the symbols, >, <, and =, using various strategies, including the number line.	Gr2 Student Bk A: 3, 5, 18-23, 24-31, 33, 109-114, 116-119, 253, 279-281 Gr2 Wkbk A: 7-12, 13-16, 18, 21, 23, 33, 99-100, 165-168, 177-178, 179-181, 183-184, 187-190, 193-196, 197, 203-204, 205-208, 212-213 Gr2 Student Bk B: Chapter 12 Fractions—12.3 Comparing and Ordering Fractions [*Gr2 Student Bk B citation includes chapter number and title, as well as lesson number and title; page numbers currently not available]		
e.	Identify and describe even and odd whole numbers.	*Taught in Kindergarten.		✓
Objective 1.2: Use unit fractions to identify parts of the whole and parts of a set.				
a.	Divide geometric shapes into two, three, or four equal parts and identify the parts as halves, thirds, or fourths.	Gr2 Student Bk B: Chapter 12 Fractions—12.1 Understanding Fractions; 12.2 Making One Whole; Chapter 19 Shapes and Patterns—19.1 Shapes and Two-Dimensional Figures; 19.2 Shapes and Three-Dimensional Figures [*Gr2 Student Bk B citations include chapter number and title, as well as lesson number and title; page numbers currently not available]		
b.	Divide sets of objects into two, three, or four parts of equal number of objects and identify the parts as halves, thirds, or fourths.	Gr2 Student Bk B: Chapter 12 Fractions—12.1 Understanding Fractions; 12.2 Making One Whole;		

		12.3 Comparing and Ordering Fractions [*Gr2 Student Bk B citations include chapter number and title, as well as lesson number and title; page numbers currently not available]		
c.	Represent the unit fractions $\frac{1}{2}$, $\frac{1}{3}$, and $\frac{1}{4}$ with objects, pictures, words (e.g., ___ out of ___ equal parts), and symbols.	Gr2 Student Bk B: Chapter 12 Fractions—12.1 Understanding Fractions; 12.2 Making One Whole; 12.3 Comparing and Ordering Fractions [*Gr2 Student Bk B citations include chapter number and title, as well as lesson number and title; page numbers currently not available]		
Objective 1.3: Estimate, model, illustrate, describe, and solve problems involving two- and three-digit addition and subtraction.				
a.	Demonstrate quick recall of addition facts (up to $10 + 10$) and related subtraction facts.	Gr2 Student Bk A: 4-5, 37, 39-41, 43, 45, 47-48, 51-53, 59-60, 64-66, 69-71, 75, 77, 81-83, 88-89, 95, 97, 99, 104, 106-108, 110-114, 116-120, 126, 129, 217, 219, 227, 234, 236-239, 243, 249, 254-255, 257, 259, 265, 279-281 Gr2 Wkbk A: 25-48, 49-72, 73-106, 179-183, 189, 193-195, 202 Gr2 Student Bk B: Chapter 10 Mental Math and Estimation—10.1 Mental Addition; 10.2 Mental Subtraction; 10.3 Rounding Numbers to Estimate [*Gr2 Student Bk B citations include chapter number and title, as well as lesson		

		number and title; page numbers currently not available]		
b.	Model addition and subtraction of two- and three-digit whole numbers (sums and minuends to 1000) in a variety of ways.	<p>Gr2 Student Bk A: 2-5, 8-9, 35-37, 38-41, 42-45, 46-48, 49-55, 57-60, 61-63, 67-69, 72-76, 78-81, 84-86, 92-93, 96-102, 103-104, 106-108, 109-114, 115-121, 122-123, 278-280, 278-281</p> <p>Gr2 Wkbk A: 4-5, 7-11, 25, 31, 35, 39, 45, 49, 53, 57, 61, 65, 69, 73-76, 77-80, 81-84, 85-92, 230, 238-239, 252</p> <p>Gr2 Student Bk B: Chapter 10 Mental Math and Estimation—10.1 Mental Addition; 10.2 Mental Subtraction; 10.3 Rounding Numbers to Estimate [*Gr2 Student Bk B citations include chapter number and title, as well as lesson number and title; page numbers currently not available]</p>		
c.	Write a story problem that relates to a given addition or subtraction equation, and write a number sentence to solve a story problem that is related to the environment.	<p>Gr2 Student Bk A: 37,100-101, 116-117, 120, 217, 254, 255-256, 279-281</p> <p>Gr2 Wkbk A: 28, 37-38, 47, 51-52, 55, 83, 91-92, 103, 108, 117, 228</p>		
d.	Demonstrate fluency with two- and three-digit addition and subtraction problems, using efficient, accurate, and generalizable strategies that include standard algorithms and mental arithmetic, and describe why the procedures work.	<p>Gr2 Student Bk A: 18-23, 26-33, 34-37, 38-41, 42-44, 46-48, 49-55, 57, 216-220, 225-226</p> <p>Gr2 Wkbk A: 25-30, 31-38, 39-44, 45-48, 49-52, 53-56, 57-60, 61-64, 65-68, 69-72, 73-84, 85-94, 95-98, 101-106, 252-254</p> <p>Gr2 Student Bk B: Chapter 10 Mental Math and Estimation—10.1</p>		

		Mental Addition; 10.2 Mental Subtraction; 10.3 Rounding Numbers to Estimate [*Gr2 Student Bk B citations include chapter number and title, as well as lesson number and title; page numbers currently not available]		
e.	Use the mathematical relationship between addition and subtraction and properties of addition to model and solve problems.	<p>Gr2 Student Bk A: 35-37, 38-39, 54, 57, 59, 59-60, 61-66, 67-71, 74-75, 77, 80-81, 85, 87-88, 90-91, 93, 95, 96-99, 103-104, 106, 109-112, 115, 122-123, 232-233, 249, 253-254, 256-257</p> <p>Gr2 Wkbk A: 49, 51-52, 53, 55-56, 57, 59-60, 61, 63-64, 65-68, 69, 71-72, 75-76, 79-80, 81-84, 85-90, 91-94, 95-98, 101-106, 209-210, 214-216, 228-230, 239</p> <p>Gr2 Student Bk B: Chapter 10 Mental Math and Estimation—10.1 Mental Addition; 10.2 Mental Subtraction [*Gr2 Student Bk B citations include chapter number and title, as well as lesson number and title; page numbers currently not available]</p>		
f.	Recognize that addition number sentences have related subtraction sentences (e.g., $8-5=3$, $3+5=8$).	<p>Gr2 Student Bk A: 35-37, 57, 59-60, 61-66, 74-75, 77, 80-81, 85, 88, 91, 93, 95-99, 103-104, 106, 109-112, 115, 122-123</p> <p>Gr2 Wkbk A: 43, 49, 51-52, 53-54, 55-56, 57-58, 59-60, 61-62, 63-64, 65-68, 69, 71-72, 101-106</p> <p>Gr2 Student Bk B: Chapter 10 Mental Math and Estimation—10.1</p>		

		Mental Addition; 10.2 Mental Subtraction [*Gr2 Student Bk B citations include chapter number and title, as well as lesson number and title; page numbers currently not available]		
Objective 1.4: Model, illustrate, and pictorially record solutions to simple multiplication and division problems.				
a.	Represent multiplication with equal groups using concrete objects and skip counting by twos, fives, and tens.	<p>Gr2 Student Bk A: 125-126, 127-133, 142, 145-146, 148, 150-152, 153-161, 162-172, 173-178, 179-182, 187-188</p> <p>Gr2 Wkbk A: 107-110, 115-116, 118, 121-125, 127-144, 152-161, 248</p> <p>Gr2 Student Bk B: Chapter 15 Multiplication Tables of 3 and 4—15.1 Multiplying 3: Skip Counting; 15.2 Multiplying 3: Using Dot Paper; 15.3 Multiplying 4: Skip-Counting; 15.4 Multiplying 4: Using Dot Paper; Chapter 16 Using Bar Models: Multiplication and Division—16.1 Real-World Problems: Multiplication [*Gr2 Student Bk B citations include chapter number and title, as well as lesson number and title; page numbers currently not available]</p>		
b.	Represent division as fair shares using concrete objects or pictures.	<p>Gr2 Student Bk A: 134-141, 143-146, 148, 179-182</p> <p>Gr2 Wkbk A: 111-114, 117-118, 120, 121-126, 147-148, 157-159</p> <p>Gr2 Student Bk B: Chapter 15</p>		

		Multiplication Tables of 3 and 4— 15.5 Related Division Facts; Chapter 16 Using Bar Models: Multiplication and Division—16.2 Real-World Problems: Division [*Gr2 Student Bk B citations include chapter number and title, as well as lesson number and title; page numbers currently not available]		
STANDARD II: Students will model, represent, and interpret patterns and number relationships to create and solve problems with addition and subtraction.				
Percentage of coverage in the <i>student and teacher edition</i> for Standard II: <u>80</u> %		Percentage of coverage not in student or teacher edition, but covered in the <i>ancillary material</i> for Standard II: _____ %		
OBJECTIVES & INDICATORS		Coverage in <i>Student Edition (SE)</i> and <i>Teacher Edition (TE)</i> (pg #'s, etc.)	Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)	<i>Not covered in TE, SE or ancillaries</i> ✓
Objective 2.1: Recognize, describe, create, and extend growing patterns.				
a.	Determine the next term in linear patterns (e.g., 2, 4, 6...; the number of hands on one person, two people, three people).	Gr2 Student Bk A: 31-32, 88-89, 151, 163, 172-175 Gr2 Wkbk A: 5-6, 17-20, 23-24, 99-100, 119, 128, 134-135, 141, 245		
b.	Construct models and skip count by twos, threes, fives, and tens and relate to repeated addition.	Gr2 Student Bk A: 8-9, 125-126, 127-133, 148, 150-152, 169, 187 Gr2 Wkbk A: 4-5, 17-20, 24, 99-100, 119-120, 128, 133-135, 157-158 Gr2 Student Bk B: Chapter 15 Multiplication Tables of 3 and 4— 15.1 Multiplying 3: Skip Counting; 15.3 Multiplying 4: Skip-Counting [*Gr2 Student Bk B citations		

		include chapter number and title, as well as lesson number and title; page numbers currently not available]		
Objective 2.2: Model, represent, and interpret number relationships using mathematical symbols.				
a.	Recognize that “ \neq ” indicates a relationship in which the two sides of the inequality are expressions of different numbers.			✓
b.	Recognize that symbols such as x , \triangle , or \diamond in an addition or subtraction equation represent a number that will make the statement true.	Gr2 Student Bk A: 4-5, 60, 64, 69, 75, 81, 95, 97, 99, 104, 106, 110-112, 116-119, 126, 129, 138, 141, 254 Gr2 Wbk A: 43, 49, 53, 57, 61, 65, 67-68, 101-102		
c.	Use the commutative and associative properties of addition to simplify calculations.	Gr2 Student Bk A: 35-37, 57, 104, 234, 237, 248-249 Gr2 Wbk A: 194, 196, 202, 209-210, 238-239		
STANDARD III: Students will understand simple geometry and measurement concepts as well as collect, represent, and draw conclusions from data.				
Percentage of coverage in the <i>student and teacher edition</i> for Standard III: <u>94</u> %		Percentage of coverage not in student or teacher edition, but covered in the <i>ancillary material</i> for Standard III: _____ %		
OBJECTIVES & INDICATORS		Coverage in <i>Student Edition (SE)</i> and <i>Teacher Edition (TE)</i> (pg #'s, etc.)	Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)	<i>Not covered in TE, SE or ancillaries</i> ✓
Objective 3.1: Describe, classify, and create geometric figures.				
a.	Describe and classify plane and solid geometric figures (i.e., circle, triangle, rectangle, square, trapezoid, rhombus, parallelogram, pentagon, hexagon, cube, sphere, cone) according to the number of sides and angles or faces, edges,	Gr2 Student Bk B: Chapter 18 Lines and Surfaces—18.1 Straight Lines and Curves; 18.2 Flat and Curved Surfaces; Chapter 19 Shapes		

	and vertices.	and Patterns—19.1 Shapes and Two-Dimensional Figures; 19.2 Shapes and Three-Dimensional Figures [*Gr2 Student Bk B citations include chapter number and title, as well as lesson number and title; page numbers currently not available]		
b.	Compose and decompose shapes and figures by substituting arrangements of smaller shapes for larger shapes or substituting larger shapes for arrangements of smaller shapes.	Gr2 Student Bk B: Chapter 19 Shapes and Patterns—19.1 Shapes and Two-Dimensional Figures; 19.2 Shapes and Three-Dimensional Figures [*Gr2 Student Bk B citations include chapter number and title, as well as lesson number and title; page numbers currently not available]		
c.	Compose and decompose shapes and figures and describe the part-whole relationships, similarities, and differences.	Gr2 Student Bk A: 92, 96-99, 101-102, 103-104, 106-107, 109-114, 115-121, 122-123, 233-234, 237, 248-249, 251-252, 253-254, 256-257, 259, 270-272, 275, 277, 278-280, 282-283 Gr2 Wkbk A: 73-92, 95-98, 194, 209-210, 219-222, 225, 233-235, 238-239, 252 Gr2 Student Bk B: Chapter 19 Shapes and Patterns—19.1 Shapes and Two-Dimensional Figures; 19.2 Shapes and Three-Dimensional Figures [*Gr2 Student Bk B citations include chapter number and title, as well as lesson number and title; page numbers currently not available]		

Objective 3.2: Identify and use units of measure, iterate (repeat) that unit, and compare the number of iterations to the item being measured.			
a.	Identify and use measurement units to measure, to the nearest unit, length (i.e., inch, centimeter), weight in pounds, and capacity in cups.	<p>Gr2 Student Bk A: 189, 192-195, 196-200, 201-210, 211-215, 222-223, 224, 228-234, 240-244, 245-252, 263, 273-277, 278-281</p> <p>Gr2 Wkbk A: 165-190, 191-216, 223-236, 237-238</p> <p>Gr2 Student Bk B: Chapter 13 Customary Measurement—13.1 Measuring in Feet; 13.2 Comparing Length in Feet; 13.3 Measuring in Inches; 13.4 Comparing Lengths in Inches; 13.5 Real-World Problems: Customary Length; Chapter 16 Using Bar Models: Multiplication and Division—16.3 Real-World Problems: Measurement [*Gr2 Student Bk B citations include chapter number and title, as well as lesson number and title; page numbers currently not available]</p> <p>*No capacity in cups at this level.</p>	
b.	Estimate and measure length by iterating a nonstandard or standard unit of measure.	<p>Gr2 Student Bk A: 189, 191, 192-195, 197-198, 204</p> <p>Gr2 Wkbk A: 167-168, 173, 231-236</p> <p>Gr2 Student Bk B: Chapter 13 Customary Measurement—13.1 Measuring in Feet; 13.2 Comparing Length in Feet; 13.3 Measuring in Inches; 13.4 Comparing Lengths in Inches; 13.5 Real-World Problems:</p>	

		Customary Length; Chapter 16 Using Bar Models: Multiplication and Division—16.3 Real-World Problems: Measurement [*Gr2 Student Bk B citations include chapter number and title, as well as lesson number and title; page numbers currently not available]		
c.	Use different units to measure the length of the same object and recognize that the smaller the unit, the more iterations needed to cover a given length.	Gr2 Student Bk A: 201, 241-242, 263, 265 Gr2 Wkbk A: 168 Gr2 Student Bk B: Chapter 13 Customary Measurement—13.1 Measuring in Feet; 13.2 Comparing Length in Feet; 13.3 Measuring in Inches; 13.4 Comparing Lengths in Inches; 13.5 Real-World Problems: Customary Length; Chapter 16 Using Bar Models: Multiplication and Division—16.3 Real-World Problems: Measurement [*Gr2 Student Bk B citations include chapter number and title, as well as lesson number and title; page numbers currently not available]		
d.	Determine the value of a set of up to five coins that total \$1.00 or less (e.g., three dimes, one nickel, and one penny equals 36¢).	Gr2 Student Bk B: Chapter 11 Money—11.1 Quarter, Dime, Nickel, and Penny; 11.2 \$1, \$5, \$10, \$20 Bills; 11.3 Comparing Amounts of Money [*Gr2 Student Bk B citations include chapter number and title, as well as lesson number and title; page numbers currently not available]		
e.	Tell time to the quarter-hour and sequence a series of daily	Gr2 Student Bk B: Chapter 14		

	events by time (e.g., breakfast at 7:00 a.m., school begins at 9:00 a.m., school ends at 3:00 p.m.).	Time—14.1 The Minute Hand; 14.2 Reading and Writing Time; 14.3 Using A.M. and P.M.; 14.4 Elapsed Time [*Gr2 Student Bk B citations include chapter number and title, as well as lesson number and title; page numbers currently not available]		
Objective 3: Collect, record, organize, display, and interpret numerical data.				
a.	Collect and record data systematically, using a strategy for keeping track of what has been counted.	Gr2 Student Bk A: 29-31, 194-195, 204, 230, 247, 255 44, 118, 167-168, 183, 187, 228-230, 232 Gr2 Student Bk B: Chapter 17 Picture Graphs—17.1 Reading Picture Graphs with Scales; 17.2 Making Picture Graphs; 17.3 Real-World Problems: Picture Graphs [*Gr2 Student Bk B citations include chapter number and title, as well as lesson number and title; page numbers currently not available]		
b.	Organize and represent the same data in more than one way.	Gr2 Student Bk A: 29-31, 92, 96-101, 103-104, 109-114, 115-121, 194-195, 216-219, 253-254, 278-280 Gr2 Wkbk A: 15, 73-98, 106, 118, 228-230, 232 Gr2 Student Bk B: Chapter 17 Picture Graphs—17.1 Reading Picture Graphs with Scales; 17.2 Making Picture Graphs; 17.3 Real-World Problems: Picture Graphs [*Gr2 Student Bk B citations		

		include chapter number and title, as well as lesson number and title; page numbers currently not available]		
c.	Organize, display, and label information, including keys, using pictographs, tallies, bar graphs, and organized tables.	<p>Gr2 Student Bk A: 29-30, 92, 96-101, 103-104, 107, 194-195, 230, 247, 255</p> <p>Gr2 Wkbk A: 81-95, 97-98, 228-230, 232</p> <p>Gr2 Student Bk B: Chapter 17 Picture Graphs—17.1 Reading Picture Graphs with Scales; 17.2 Making Picture Graphs; 17.3 Real-World Problems: Picture Graphs [*Gr2 Student Bk B citations include chapter number and title, as well as lesson number and title; page numbers currently not available]</p>		
d.	Describe data represented on charts and graphs and answer simple questions related to data representations.	<p>Gr2 Student Bk A: 29-30, 107, 194, 247, 255</p> <p>Gr2 Wkbk A: 15, 167-168, 183, 187, 230</p> <p>Gr2 Student Bk B: Chapter 17 Picture Graphs—17.1 Reading Picture Graphs with Scales; 17.3 Real-World Problems: Picture Graphs [*Gr2 Student Bk B citations include chapter number and title, as well as lesson number and title; page numbers currently not available]</p>		