

# Knowre Math: **Grade 2** Curriculum

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## Chapter 1 Basic Addition Facts

Lesson	Topic	MGSE
1-1 Points on Number Lines	A) Points on Number Lines	MGSE2.MD.6
	B) Distance Between Points on a Number Line	
1-2 Moving Points on Number Lines	A) Moving Points to the Right and Left on a Number Line	MGSE2.MD.6
1-3 Counting On	A) Counting On to Add One-Digit Numbers	MGSE2.OA.2, MGSE2.MD.6
1-4 Using Number Lines to Make Ten	A) Adding to Ten	MGSE2.OA.1, MGSE2.OA.2, MGSE2.MD.6
	B) Counting On to Add Ten and a One-Digit Number	
1-5 Making Ten to Add	A) Adding by Making Ten	MGSE2.OA.1, MGSE2.OA.2
1-6 Adding One-Digit Numbers	A) Adding One-Digit Numbers	MGSE2.OA.1, MGSE2.OA.2
1-7 Adding Three or More One-Digit Numbers	A) Adding Ten and a One-Digit Number	MGSE2.OA.2
	B) Adding Three or More One-Digit Numbers	

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## Chapter 2 Basic Subtraction Facts

<b>Lesson</b>	<b>Topic</b>	<b>MGSE</b>
2-1 Counting Back	A) Counting Back to Subtract One-Digit Numbers	MGSE2.OA.2
2-2 Making Ten to Subtract	A) Differences of Ten	MGSE2.OA.1, MGSE2.OA.2
	B) Subtracting One-Digit Numbers by Making Ten	MGSE2.OA.2
2-3 Subtracting within Twenty	A) Differences Less Than Ten When Subtracting One-Digit Numbers	MGSE2.OA.1, MGSE2.OA.2
2-4 Addition Expressions	A) Parts of Addition Sentences	MGSE2.OA.1
	B) Addition Expressions and Equations	
2-5 Subtraction Expressions	A) Parts of Subtraction Sentences	MGSE2.OA.1
	B) Subtraction Expressions and Equations	
	C) Expressions with More Than One Addition and/or Subtraction Operation	
2-6 Relationship Between Addition and Subtraction	A) Using Addition Sentences to Write Related Subtraction Sentences	MGSE2.OA.1
	B) Missing Numbers in Addition Sentences	
	C) Using Subtraction Sentences to Write Related Addition Sentences	
	D) Missing Numbers in Subtraction Sentences	

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## Chapter 3 Numbers Less than 100

<b>Lesson</b>	<b>Topic</b>	<b>MGSE</b>
3-1 Models of Numbers Less Than 100 – No Regrouping	A) Modeling Numbers to 20 with Ones	MGSE2.NBT.3
	B) Regrouping Ones	
	C) Tens and Ones to Write Numbers	
3-2 Models of Numbers Less Than 100 – Regrouping	A) Using Base Ten Blocks to Model Numbers	MGSE2.NBT.3
3-3 Place Values of Numbers Less Than 100	A) Place Values Less Than Hundreds	MGSE2.NBT.3
3-4 Expanded Form of Numbers Less Than 100	A) Expanded and Standard Form of Numbers	MGSE2.NBT.3
3-5 Reading and Writing Numbers Less Than 100	A) Reading and Writing One-Digit Numbers	MGSE2.NBT.3
	B) Reading and Writing Two-Digit Numbers	
3-6 Counting by Ones, Fives, and Tens within 100	A) Counting by Ones	MGSE2.NBT.2
	B) Counting by Tens	
	C) Counting by Fives	
3-7 Adding and Subtracting Ten	A) Adding Ten to a Two-Digit Number	MGSE2.NBT.2
	B) Subtracting Ten from a Two-Digit Number	
3-8 Ordinal Numbers	A) Ordinal Position of Objects – First Through Twentieth	
3-9 Even and Odd Numbers to 20	A) Even and Odd Numbers	MGSE2.OA.3
3-10 Even Numbers	A) Writing Numbers as the Sum of Two Equal Addends	MGSE2.OA.3
3-11 Comparing Numbers Less Than 100	A) Inequality and Equality Symbols and Phrases	MGSE2.NBT.4
	B) Base Ten Blocks to Compare Numbers	
	C) Place Values to Compare Numbers	
	D) Comparing Numbers	

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## Chapter 4 Add Whole Numbers: Sums Less Than 100

Lesson	Topic	MGSE
4-1 Add One-Digit and Two-Digit Numbers - No Regrouping	A) Base Ten Blocks to Add One-Digit and Two-Digit Numbers without Regrouping	MGSE2.OA.1, MGSE2.NBT.5, MGSE2.NBT.7, MGSE2.NBT.9
	B) Place Values to Add One-Digit and Two-Digit Numbers without Regrouping	
	C) Adding One-Digit and Two-Digit Numbers without Regrouping	
4-2 Add One-Digit and Two-Digit Numbers - Regrouping	A) Base Ten Blocks to Add One-Digit and Two-Digit Numbers with Regrouping of Ones	MGSE2.OA.1, MGSE2.NBT.5, MGSE2.NBT.7, MGSE2.NBT.9
	B) Place Values to Add One-Digit and Two-Digit Numbers with Regrouping of Ones	
	C) Adding One-Digit and Two-Digit Numbers with Regrouping of Ones	
4-3 Add Two-digit Numbers - No Regrouping	A) Base Ten Blocks to Add Two-Digit Numbers without Regrouping	MGSE2.OA.1, MGSE2.NBT.5, MGSE2.NBT.6, MGSE2.NBT.7, MGSE2.NBT.9
	B) Place Values to Add Two-Digit Numbers without Regrouping	
	C) Adding Two-Digit Numbers without Regrouping	
4-4 Add Two-digit Numbers - Regrouping	A) Base Ten Blocks to Add Two-Digit Numbers with Regrouping of Ones	MGSE2.OA.1, MGSE2.NBT.5, MGSE2.NBT.6, MGSE2.NBT.7, MGSE2.NBT.9
	B) Place Values to Add Two-Digit Numbers with Regrouping of Ones	
	C) Adding Two-Digit Numbers with Regrouping of Ones	

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## Chapter 5 Subtract Whole Numbers: Minuends Less Than 100

Lesson	Topic	MGSE
5-1 One- and Two-Digit Differences - No Regrouping	A) Base Ten Blocks to Subtract One-Digit and Two-Digit Numbers without Regrouping	MGSE2.OA.1, MGSE2.NBT.5, MGSE2.NBT.7, MGSE2.NBT.9
	B) Place Values to Subtract One-Digit and Two-Digit Numbers without Regrouping	
	C) Subtracting One-Digit and Two-Digit Numbers without Regrouping	
5-2 One- and Two-Digit Differences - Regrouping	A) Base Ten Blocks to Subtract One-Digit and Two-Digit Numbers with Regrouping	MGSE2.OA.1, MGSE2.NBT.5, MGSE2.NBT.7, MGSE2.NBT.9
	B) Place Values to Subtract One-Digit and Two-Digit Numbers with Regrouping	
	C) Subtracting One-Digit and Two-Digit Numbers with Regrouping	
5-3 Subtract Two-Digit Numbers - No Regrouping	A) Base Ten Blocks to Subtract Two-Digit Numbers without Regrouping	MGSE2.OA.1, MGSE2.NBT.5, MGSE2.NBT.7, MGSE2.NBT.9
	B) Place Values to Subtract Two-Digit Numbers without Regrouping	
	C) Subtracting Two-Digit Numbers without Regrouping	
5-4 Subtract Two-Digit Numbers - Regrouping	A) Base Ten Blocks to Subtract Two-Digit Numbers with Regrouping	MGSE2.OA.1, MGSE2.NBT.5, MGSE2.NBT.7, MGSE2.NBT.9
	B) Place Values to Subtract Two-Digit Numbers with Regrouping	
	C) Subtracting Two-Digit Numbers with Regrouping	
5-5 Adding or Subtracting Three or More Numbers - Less Than 100	A) Adding Three or More One-Digit Numbers	MGSE2.OA.1, MGSE2.NBT.5, MGSE2.NBT.6, MGSE2.NBT.7, MGSE2.NBT.9
	B) Adding Three or More One-Digit or Two-Digit Numbers	
	C) Subtracting Three or More One-Digit or Two-Digit Numbers	
	D) Adding and Subtracting Three or More One-Digit or Two-Digit Numbers	

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## Chapter 6 Numbers Less Than 1,000

<b>Lesson</b>	<b>Topic</b>	<b>MGSE</b>
6-1 Using Models to Make Numbers Less Than 1,000	A) Using Base Ten Blocks to Model Numbers	MGSE2.NBT.1.a, MGSE2.NBT.1.b, MGSE2.NBT.3
6-2 Using Models to Write Numbers Less Than 1,000	A) Using Base Ten Blocks to Write Numbers	MGSE2.NBT.1.a, MGSE2.NBT.1.b, MGSE2.NBT.3
6-3 Place Values of Numbers Less Than 1,000	A) Place Values Less Than Thousands	MGSE2.NBT.1.a, MGSE2.NBT.1.b, MGSE2.NBT.3
6-4 Expanded Form of Numbers Less Than 1,000	A) Expanded and Standard Form of Numbers	MGSE2.NBT.1.a, MGSE2.NBT.1.b, MGSE2.NBT.3
6-5 Reading and Writing Numbers Less Than 1,000	A) Reading and Writing Three-Digit Numbers in Words	MGSE2.NBT.3
6-6 Counting by Ones within 1,000	A) Counting by Ones	MGSE2.NBT.2
6-7 Counting by Tens within 1,000	A) Counting by Tens	MGSE2.NBT.2, MGSE2.NBT.8
	B) Adding Ten to a Three-Digit Number	
	C) Subtracting Ten from a Three-Digit Number	
6-8 Counting by Hundreds within 1,000	A) Counting by Hundreds	MGSE2.NBT.2, MGSE2.NBT.8
	B) Adding One Hundred	
	C) Subtracting One Hundred	
6-9 Counting by Fives within 1,000	A) Counting by Fives	MGSE2.NBT.2
6-10 Comparing Numbers Less Than 1,000	A) Base Ten Blocks to Compare Numbers	MGSE2.NBT.4
	B) Place Values to Compare Numbers	
	C) Comparing Numbers	

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## Chapter 7 Add Whole Numbers: Sums Less Than 1,000

Lesson	Topic	MGSE
7-1 Add Two-Digit Numbers	A) Using Models to Add Two Two-Digit Numbers - One Regrouping	MGSE2.NBT.6, MGSE2.NBT.7, MGSE2.NBT.9
	B) Standard Algorithm to Add Two Two-Digit Numbers - One Regrouping	
7-2 Add Two-Digit and One-Digit Numbers	A) Using Models to Add One-Digit and Two-Digit Numbers - Sum is 100 or More	MGSE2.NBT.6, MGSE2.NBT.7, MGSE2.NBT.9
	B) Standard Algorithm to Add One-Digit and Two-Digit Numbers - Sum is 100 or More	
7-3 Add Two-Digit Numbers - Two Regroupings	A) Using Models to Add Two Two-Digit Numbers - Sum is 100 or More and Two Regroupings	MGSE2.NBT.6, MGSE2.NBT.7, MGSE2.NBT.9
	B) Standard Algorithm to Add Two Two-Digit Numbers - Sum is 100 or More and Two Regroupings	
7-4 Add Three-Digit and One-Digit Numbers - No Regrouping	A) Using Models to Add One-Digit and Three-Digit Numbers - No Regrouping	MGSE2.NBT.7, MGSE2.NBT.9
	B) Standard Algorithm to Add One-Digit and Three-Digit Numbers - No Regrouping	
7-5 Add Three-Digit and One-Digit Numbers - One Regrouping	A) Using Models to Add One-Digit and Three-Digit Numbers - One Regrouping	MGSE2.NBT.7, MGSE2.NBT.9
	B) Standard Algorithm to Add One-Digit and Three-Digit Numbers - One Regrouping	
7-6 Add Three-Digit and One-Digit Numbers - Two Regroupings	A) Using Models to Add One-Digit and Three-Digit Numbers - Two Regroupings	MGSE2.NBT.7, MGSE2.NBT.9
	B) Standard Algorithm to Add One-Digit and Three-Digit Numbers - Two Regroupings	
7-7 Add Three-Digit and Two-Digit Numbers - No Regrouping	A) Using Models to Add Two-Digit and Three-Digit Numbers - No Regrouping	MGSE2.NBT.7, MGSE2.NBT.9
	B) Standard Algorithm to Add Two-Digit and Three-Digit Numbers - No Regrouping	
7-8 Add Three-Digit and Two-Digit Numbers - One Regrouping	A) Using Models to Add Two-Digit and Three-Digit Numbers - One Regrouping	MGSE2.NBT.7, MGSE2.NBT.9
	B) Standard Algorithm to Add Two-Digit and Three-Digit Numbers - One Regrouping	
7-9 Add Three-Digit and Two-Digit Numbers - Two Regroupings	A) Using Models to Add Two-Digit and Three-Digit Numbers - Two Regroupings	MGSE2.NBT.7, MGSE2.NBT.9
	B) Standard Algorithm to Add Two-Digit and Three-Digit Numbers - Two Regroupings	

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## Chapter 7 Add Whole Numbers: Sums Less Than 1,000 (cont.)

Lesson	Topic	MGSE
7-10 Add Two Three-Digit Numbers – No Regrouping	A) Using Models to Add Two Three-Digit Numbers - No Regrouping	MGSE2.NBT.7, MGSE2.NBT.9
	B) Standard Algorithm to Add Two Three-Digit Numbers - No Regrouping	
7-11 Add Two Three-Digit Numbers – One Regrouping	A) Using Models to Add Two Three-Digit Numbers - One Regrouping	MGSE2.NBT.7, MGSE2.NBT.9
	B) Standard Algorithm to Add Two Three-Digit Numbers - One Regrouping	
7-12 Add Two Three-Digit Numbers – Two Regroupings	A) Using Models to Add Two Three-Digit Numbers - Two Regroupings	MGSE2.NBT.7, MGSE2.NBT.9
	B) Standard Algorithm to Add Two Three-Digit Numbers - Two Regroupings	
7-13 Horizontal Addition	A) Adding a One- or Two-Digit Number to a Two-Digit Number with Regrouping of Tens	MGSE2.NBT.6, MGSE2.NBT.7, MGSE2.NBT.9
	B) Adding a One-, Two-, or Three-Digit Number to a Three-Digit Number	
	C) Adding Three or More One-Digit and Two-Digit Numbers	



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## Chapter 8 Subtract Whole Numbers: Minuends Less Than 1,000

Lesson	Topic	MGSE
8-1 Subtract One-Digit Numbers from Three-Digit Numbers - No Regrouping	A) Using Models to Subtract One-Digit and Three-Digit Numbers - No Regrouping	MGSE2.NBT.7, MGSE2.NBT.9
	B) Standard Algorithm to Subtract One-Digit and Three-Digit Numbers - No Regrouping	
8-2 Subtract One-Digit Numbers from Three-Digit Numbers - One Regrouping	A) Using Models to Subtract One-Digit and Three-Digit Numbers - One Regrouping	MGSE2.NBT.7, MGSE2.NBT.9
	B) Standard Algorithm to Subtract One-Digit and Three-Digit Numbers - One Regrouping	
8-3 Subtract Two-Digit Numbers from Three-Digit Numbers - No Regrouping	A) Using Models to Subtract Two-Digit and Three-Digit Numbers - No Regrouping	MGSE2.NBT.7, MGSE2.NBT.9
	B) Standard Algorithm to Subtract Two-Digit and Three-Digit Numbers - No Regrouping	
8-4 Subtract Two-Digit Numbers from Three-Digit Numbers - One Regrouping	A) Using Models to Subtract Two-Digit and Three-Digit Numbers - One Regrouping	MGSE2.NBT.7, MGSE2.NBT.9
	B) Standard Algorithm to Subtract Two-Digit and Three-Digit Numbers - One Regrouping	
8-5 Subtract Two-Digit Numbers from Three-Digit Numbers - Two Regroupings	A) Using Models to Subtract Two-Digit and Three-Digit Numbers - Two Regroupings	MGSE2.NBT.7, MGSE2.NBT.9
	B) Standard Algorithm to Subtract Two-Digit and Three-Digit Numbers - Two Regroupings	
8-6 Subtract Two Three-Digit Numbers - No Regrouping	A) Using Models to Subtract Three-Digit Numbers - No Regrouping	MGSE2.NBT.7, MGSE2.NBT.9
	B) Standard Algorithm to Subtract Three-Digit Numbers - No Regrouping	
8-7 Subtract Two Three-Digit Numbers - One Regrouping	A) Using Models to Subtract Three-Digit Numbers - One Regrouping	MGSE2.NBT.7, MGSE2.NBT.9
	B) Standard Algorithm to Subtract Three-Digit Numbers - One Regrouping	
8-8 Subtract Two Three-Digit Numbers - Two Regroupings	A) Using Models to Subtract Three-Digit Numbers	MGSE2.NBT.7, MGSE2.NBT.9
	B) Standard Algorithm to Subtract Three-Digit Numbers	
8-9 Subtract One-Digit Numbers from Three-Digit Numbers Across Zeros	A) Using Models to Subtract One-Digit and Three-Digit Numbers - Two Regroupings Across Zero	MGSE2.NBT.7, MGSE2.NBT.9
	B) Standard Algorithm to Subtract One-Digit and Three-Digit Numbers - Two Regroupings Across Zero	

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### Chapter 8 Subtract Whole Numbers: Minuends Less Than 1,000 (cont.)

Lesson	Topic	MGSE
8-10 Subtract Two-Digit Numbers from Three-Digit Numbers Across Zeros	A) Using Models to Subtract Two-Digit and Three-Digit Numbers - Two Regroupings Across Zero	MGSE2.NBT.7,
	B) Standard Algorithm to Subtract Two-Digit and Three-Digit Numbers - Two Regroupings Across Zero	MGSE2.NBT.9
8-11 Subtract Two Three-Digit Numbers Across Zeros	A) Using Models to Subtract Three-Digit Numbers - Two Regroupings Across Zero	MGSE2.NBT.7,
	B) Standard Algorithm to Subtract Three-Digit Numbers - Two Regroupings Across Zero	MGSE2.NBT.9
8-12 Horizontal Subtraction	A) Subtracting from Three-Digit Numbers	
	B) Subtracting Three of More Numbers Horizontally	MGSE2.NBT.7,
	C) Adding and Subtracting Three of More Numbers Horizontally	MGSE2.NBT.9
8-13 Relationship Between Addition and Subtraction - Less Than 1,000	A) Missing Numbers in Addition Sentences	MGSE2.NBT.5,
	B) Missing Numbers in Subtraction Sentences	MGSE2.NBT.7, MGSE2.NBT.9

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## Chapter 9 Measuring Lengths

Lesson	Topic	MGSE
9-1 Customary Units of Measurement - Inches	A) Using Inches to Measure Objects	MGSE2.MD.1, MGSE2.MD.3, MGSE2.MD.5
9-2 Customary Units of Measurement - Feet	A) Using Feet to Measure Objects	MGSE2.MD.1, MGSE2.MD.3, MGSE2.MD.5
9-3 Customary Units of Measurement - Yards	A) Using Yards to Measure Objects	MGSE2.MD.1, MGSE2.MD.3, MGSE2.MD.5
	B) Estimating with Customary Units of Length	MGSE2.MD.5
9-4 Metric Units of Measurement - Centimeters	A) Using Centimeters to Measure	MGSE2.MD.1, MGSE2.MD.3, MGSE2.MD.5
9-5 Metric Units of Measurement - Meters	A) Using Meters to Measure	MGSE2.MD.1, MGSE2.MD.3, MGSE2.MD.5
	B) Estimating with Metric Units of Length	MGSE2.MD.5
9-6 Comparing Lengths	A) Longer and Shorter	MGSE2.MD.2, MGSE2.MD.4, MGSE2.MD.5
	B) Comparing Measures of Length Between Systems	MGSE2.MD.5

## Chapter 10 Displays of Data

Lesson	Topic	MGSE
10-1 Tally Marks and Frequency Tables	A) Understanding Tally Marks	MGSE2.MD.10
	B) Completing Frequency and Tally Tables	
10-2 Reading Tally Tables	A) Reading Tally Tables	MGSE2.MD.10
10-3 Making Pictographs	A) Making Pictographs	MGSE2.MD.10
10-4 Reading Pictographs	A) Reading Pictographs	MGSE2.MD.10
10-5 Making Bar Graphs	A) Making Bar Graphs	MGSE2.MD.10
10-6 Reading Bar Graphs	A) Reading Bar Graphs	MGSE2.MD.10
10-7 Making Line Plots	A) Making Line Plots	MGSE2.MD.9
10-8 Reading Line Plots	A) Reading Line Plots	

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## Chapter 11 Two- and Three-Dimensional Figures

<b>Lesson</b>	<b>Topic</b>	<b>MGSE</b>
11-1 Attributes of Two-Dimensional Figures	A) Sides, Angles, and Vertices of Two-Dimensional Figures	MGSE2.G.1
11-2 Identifying Two-Dimensional Figures	A) Identifying Two-Dimensional Figures	MGSE2.G.1
11-3 Identifying Two-Dimensional Shapes by Name	A) Using Attributes to Name a Figure	MGSE2.G.1
	B) Using the Name of a Figure to Identify Attributes	
11-4 Attributes of Three-Dimensional Figures	A) Vertices, Faces, and Edges of Three-Dimensional Figures	MGSE2.G.1
11-5 Identifying Three-Dimensional Figures	A) Identifying Solids	MGSE2.G.1
	B) Two-Dimensional Figures that Form Three-Dimensional Solids	
11-6 Rows and Columns in Arrays	A) Rows and Columns of Arrays	MGSE2.OA.4, MGSE2.G.2
11-7 Arrays and Equal Groups	A) Using an Array to Write an Addition Expression	MGSE2.OA.4, MGSE2.G.2
	B) Finding the Size of an Array	
11-8 Equal Parts	A) Identifying Equal Parts	MGSE2.G.3
	B) Naming Equal Parts	
	C) Equal Parts in a Whole	

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## Chapter 12 Time and Money

<b>Lesson</b>	<b>Topic</b>	<b>MGSE</b>
12-1 Reading Time on Clocks	A) Clockwise and Counterclockwise	MGSE2.MD.7
	B) Reading Time on Analog Clocks	
12-2 Showing Time on Clocks	A) Showing Time on Analog Clocks	MGSE2.MD.7
12-3 Using Words to Tell Time	A) Reading Time on Analog Clocks - Common Phrases	MGSE2.MD.7
12-4 Showing Time on Clocks from Words	A) Showing time on Analog Clocks from Words	MGSE2.MD.7
12-5 Coins	A) Value Pennies	MGSE2.MD.8
	B) Value of Nickels	
	C) Value of Dimes	
	D) Value of Quarters	
	E) Identifying Coins from Images and Values	
12-6 Sets of Coins	A) Values of Sets of Mixed Coins	MGSE2.MD.8
12-7 Dollars and Cents	A) Value of Dollars	MGSE2.MD.8
	B) Values of Sets of Bills and Coins	