

# Knowre Math: Grade 2 Curriculum

## Chapter 1 Basic Addition Facts

Lesson	Topic	NGSSS
1-1 Number Lines	A) Points on Number Lines	MAFS.2.MD.2.6
	B) Distance Between Points on a Number Line	
1-2 Counting On	A) Counting On to Add One-Digit Numbers	MAFS.2.OA.2.2, MAFS.2.MD.2.6
1-3 Making Ten to Add	A) Adding to Ten	MAFS.2.OA.2.2 MAFS.2.MD.2.6
	B) Counting On to Add Ten and a One-Digit Number	
	C) Adding by Making Ten	
1-4 Adding One-Digit Numbers	A) Adding One-Digit Numbers	MAFS.2.OA.2.2,
1-5 Adding Three or More One-Digit Numbers	A) Adding Ten and a One-Digit Number	MAFS.2.OA.2.2,
	B) Adding Three or More One-Digit Numbers	

## Chapter 2 Basic Subtraction Facts

Lesson	Topic	NGSSS
2-1 Counting Back	A) Counting Back to Subtract One-Digit Numbers	MAFS.2.OA.2.2, MAFS.2.MD.2.6
2-2 Making Ten to Subtract	A) Differences of Ten	MAFS.2.OA.2.2
	B) Subtracting One-Digit Numbers by Making Ten	
2-3 Subtracting within Twenty	A) Differences Less Than Ten When Subtracting One-Digit Numbers	MAFS.2.OA.2.2
2-4 Addition and Subtraction Expressions	A) Parts of Addition Sentences	MAFS.2.OA.1.1
	B) Addition Expressions and Equations	
	C) Parts of Subtraction Sentences	
	D) Subtraction Expressions and Equations	
	E) Expressions with More Than One Addition and/or Subtraction Operation	
2-5 Relationship Between Addition and Subtraction	A) Relationships Between Addition and Subtraction Sentences	MAFS.2.OA.1.1
	B) Missing Numbers in Addition and Subtraction Sentences	

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## Chapter 3 Numbers Less than 100

<b>Lesson</b>	<b>Topic</b>	<b>NGSSS</b>
3-1 Models of Numbers Less Than 100	A) Using Base Ten Blocks to Model Numbers	MAFS.2.NBT.1.3
3-2 Place Values of Numbers Less Than 100	A) Place Values Less Than Hundreds	MAFS.2.NBT.1.3
	B) Expanded and Standard Form of Numbers	
3-3 Reading and Writing Numbers Less Than 100	A) Reading and Writing One-Digit Numbers	MAFS.2.NBT.1.3
	B) Reading and Writing Two-Digit Numbers	
3-4 Counting by Ones, Fives, and Tens within 100	A) Counting by Ones and Tens	MAFS.2.NBT.1.2
	B) Add and Subtract Ten	
	C) Counting by Fives	
3-5 Even and Odd Numbers to 20	A) Even and Odd Numbers	MAFS.2.OA.3.3
	B) Writing Numbers as the Sum of Two Equal Addends	
3-6 Comparing Numbers Less Than 100	A) Inequality and Equality Symbols and Phrases	MAFS.2.NBT.1.4
	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	NGSSS
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	MAFS.2.NBT.2.5, MAFS.2.NBT.2.7, MAFS.2.NBT.2.9
	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	MAFS.2.NBT.2.5, MAFS.2.NBT.2.7, MAFS.2.NBT.2.9
	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	
	D) Adding Three or More One-Digit Numbers	
4-3 Add Two-digit Numbers - No Regrouping	A) Base Ten Blocks to Add Two-Digit Numbers without Regrouping	MAFS.2.NBT.2.5, MAFS.2.NBT.2.6, MAFS.2.NBT.2.7, MAFS.2.NBT.2.9
	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	MAFS.2.NBT.2.5, MAFS.2.NBT.2.6, MAFS.2.NBT.2.7, MAFS.2.NBT.2.9
	B) Place Values to Add Two-Digit Numbers with Regrouping of Ones	
	C) Adding Two-Digit Numbers with Regrouping of Ones	
	D) Adding Three or More One-Digit or Two-Digit Numbers	

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

Lesson	Topic	NGSSS
5-1 One- and Two-Digit Differences - No Regrouping	A) Base Ten Blocks to Subtract One-Digit and Two-Digit Numbers without Regrouping	MAFS.2.NBT.2.5, MAFS.2.NBT.2.7, MAFS.2.NBT.2.9
	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	MAFS.2.NBT.2.5, MAFS.2.NBT.2.7, MAFS.2.NBT.2.9
	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	MAFS.2.NBT.2.5, MAFS.2.NBT.2.7, MAFS.2.NBT.2.9
	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	MAFS.2.NBT.2.5, MAFS.2.NBT.2.7, MAFS.2.NBT.2.9
	B) Place Values to Subtract Two-Digit Numbers with Regrouping	
	C) Subtracting Two-Digit Numbers with Regrouping	
	D) Subtracting Three or More One-Digit or Two-Digit Numbers	
	E) Adding and Subtracting Three or More One-Digit or Two-Digit Numbers	

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## Chapter 6 Numbers Less Than 1,000

Lesson	Topic	NGSSS
6-1 Models of Numbers Less Than 1,000	A) Using Base Ten Blocks to Model Numbers	MAFS.2.NBT.1.1.a, MAFS.2.NBT.1.1.b, MAFS.2.NBT.1.3
6-2 Place Values of Numbers Less Than 1,000	A) Place Values Less Than Thousands	MAFS.2.NBT.1.1.a, MAFS.2.NBT.1.1.b, MAFS.2.NBT.1.3
	B) Expanded and Standard Form of Numbers	
6-3 Reading and Writing Numbers Less Than 1,000	A) Reading and Writing Three-Digit Numbers in Words	MAFS.2.NBT.1.3
6-4 Counting by Ones and Tens within 1,000	A) Counting by Ones and Tens	MAFS.2.NBT.1.2, MAFS.2.NBT.2.8
	B) Add and Subtract Ten	
6-5 Counting by Fives and Hundreds within 1,000	A) Counting by Hundreds	MAFS.2.NBT.1.2, MAFS.2.NBT.2.8
	B) Add and Subtract One Hundred	
	C) Counting by Fives	
6-6 Comparing Numbers Less Than 1,000	A) Base Ten Blocks to Compare Numbers	MAFS.2.NBT.1.4
	B) Place Values to Compare Numbers	
	C) Comparing Numbers	

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

<b>Lesson</b>	<b>Topic</b>	<b>NGSSS</b>
7-1 Add Two-Digit Numbers	A) Base Ten Blocks to Add One-Digit and Two-Digit Numbers with Regrouping of Tens	MAFS.2.NBT.2.6, MAFS.2.NBT.2.7, MAFS.2.NBT.2.9
	B) Place Values to Add One-Digit and Two-Digit Numbers with Regrouping of Tens	
	C) Adding One-Digit and Two-Digit Numbers with Regrouping of Tens	
7-2 Add Three-Digit and One-Digit Numbers	A) Base Ten Blocks to Add One-Digit and Three-Digit Numbers	MAFS.2.NBT.2.7, MAFS.2.NBT.2.9
	B) Place Values to Add One-Digit and Three-Digit Numbers	
	C) Adding One-Digit and Three-Digit Numbers	
7-3 Add Three-Digit and Two-Digit Numbers	A) Base Ten Blocks to Add Two-Digit and Three-Digit Numbers	MAFS.2.NBT.2.7, MAFS.2.NBT.2.9
	B) Place Values to Add Two-Digit and Three-Digit Numbers	
	C) Adding Two-Digit and Three-Digit Numbers	
7-4 Add Two Three-Digit Numbers	A) Base Ten Blocks to Add Three-Digit Numbers	MAFS.2.NBT.2.7, MAFS.2.NBT.2.9
	B) Place Values to Add Three-Digit Numbers	
	C) Adding Two Three-Digit Numbers	
7-5 Horizontal Addition	A) Adding a One- or Two-Digit Number to a Two Digit Number with Regrouping of Tens	MAFS.2.NBT.2.6, MAFS.2.NBT.2.7, MAFS.2.NBT.2.9
	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	NGSSS
8-1 Subtract One-Digit Numbers from Three-Digit Numbers	A) Base Ten Blocks to Subtract One-Digit and Three-Digit Numbers	MAFS.2.NBT.2.7, MAFS.2.NBT.2.9
	B) Place Value to Subtract One-Digit and Three-Digit Numbers	
	C) Subtracting One-Digit and Three-Digit Numbers	
8-2 Subtract Two-Digit Numbers from Three-Digit Numbers	A) Base Ten Blocks to Subtract Two-Digit and Three-Digit Numbers	MAFS.2.NBT.2.7, MAFS.2.NBT.2.9
	B) Place Value to Subtract Two-Digit and Three-Digit Numbers	
	C) Subtracting Two-Digit and Three-Digit Numbers	
8-3 Subtract Two Three-Digit Numbers	A) Base Ten Blocks to Subtract Three-Digit Numbers	MAFS.2.NBT.2.7, MAFS.2.NBT.2.9
	B) Place Value to Subtract Three-Digit Numbers	
	C) Subtracting Three-Digit Numbers	
8-4 Subtract Across Zeros	A) Base Ten Blocks to Subtract Across a Zero in a Three-Digit Number	MAFS.2.NBT.2.7, MAFS.2.NBT.2.9
	B) Place Value to Regroup Across a Zero When Subtracting from a Three-Digit Number	
	C) Regrouping Across Zero When Subtracting from a Three-Digit Number	
8-5 Horizontal Subtraction and Relationships	A) Subtracting from Three-Digit Numbers	MAFS.2.OA.1.1, MAFS.2.NBT.2.5, MAFS.2.NBT.2.7, MAFS.2.NBT.2.9
	B) Subtracting Three or More Numbers Horizontally	
	C) Adding and Subtracting Three or More Numbers Horizontally	
	D) Missing Numbers in Addition and Subtraction Sentences	

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## Chapter 9 Measuring Lengths

Lesson	Topic	NGSSS
9-1 Customary Units of Measurement	A) Using Inches to Measure Objects	MAFS.1.MD.1.a.a MAFS.2.MD.1.1, MAFS.2.MD.1.3, MAFS.2.MD.2.5
	B) Using Feet to Measure Objects	
	C) Using Yards to Measure Objects	
	D) Estimating with Customary Units of Length	
9-2 Metric Units of Measurement	A) Using Centimeters to Measure	MAFS.1.MD.1.a.a MAFS.2.MD.1.1, MAFS.2.MD.1.3, MAFS.2.MD.2.5
	B) Using Meters to Measure	
	C) Estimating with Metric Units of Length	
9-3 Comparing Lengths	A) Longer and Shorter	MAFS.2.MD.1.2, MAFS.2.MD.1.4
	B) Measuring Lengths when Starting Point is Not Zero	
	C) Comparing Measures of Length Between Systems	

## Chapter 10 Displays of Data

Lesson	Topic	NGSSS
10-1 Tally Marks and Frequency Tables	A) Understanding Tally Marks	MAFS.2.MD.4.10
	B) Converting Between Tally and Frequency Tables	
	C) Organizing Data into Tally and Frequency Tables	
	D) Reading a Tally Table	
10-2 Pictographs	A) Making Pictographs	MAFS.2.MD.4.10
	B) Using Pictographs to Make Tally and Frequency Tables	
	C) Reading Pictographs	
10-3 Bar Graphs	A) Using Bar Graphs to Make Tally and Frequency Tables	MAFS.2.MD.4.10
	B) Making Bar Graphs	
	C) Reading Bar Graphs	
10-4 Line Plots	A) Understanding Line Plots	MAFS.2.MD.4.9
	B) Using Line Plots to Make Tally and Frequency Tables	
	C) Making Line Plots	
	D) Reading Line Plots	



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## Chapter 11 Two- and Three-Dimensional Figures

Lesson	Topic	NGSSS
11-1 Attributes of Two-Dimensional Figures	A) Sides, Angles, and Vertices of Two-Dimensional Figures	MAFS.2.G.1.1
11-2 Identifying Two-Dimensional Figures	A) Identifying Two-Dimensional Figures	MAFS.2.G.1.1
	B) Using Attributes to Name a Figure	
	C) Using the Name of a Figure to Identify Attributes	
11-3 Three-Dimensional Figures	A) Vertices, Faces, and Edges of Three-Dimensional Figures	MAFS.2.G.1.1
	B) Identifying Solids	
	C) Two-Dimensional Figures that Form Three-Dimensional Solids	
11-4 Equal Groups	A) Rows and Columns of Arrays	MAFS.2.OA.3.4, MAFS.2.G.1.2
	B) Using an Array to Write an Addition Expression	
	C) Finding the Size of an Array	
11-5 Equal Parts	A) Identifying Equal Parts	MAFS.2.G.1.3
	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>NGSSS</b>
12-1 Time on Clocks	A) Clockwise and Counterclockwise	MAFS.2.MD.3.7
	B) Telling Time to the Hour and Half Hour	
	C) Telling Time to Five Minute Increments	
	D) Telling Time with a.m. and p.m.	
12-2 Using Words to Tell Time	A) Reading the Time Shown on an Analog Clock	MAFS.2.MD.3.7
	B) Showing time on an Analog Clock	
12-3 Coins	A) Value Pennies	MAFS.2.MD.3.8.b MAFS.2.MD.3.8.c
	B) Value of Nickels	
	C) Value of Dimes	
	D) Value of Quarters	
	E) Identifying Coins from Images and Values	
12-4 Dollars and Cents	A) Values of Sets of Mixed Coins	MAFS.2.MD.3.8.b
	B) Value of Dollars	MAFS.2.MD.3.8.a
	C) Values of Sets of Bills and Coins	