Moving Beyond the Page Math

Age 5-7 (strong K/1)

Recommend two-year span, completing a unit every 6 weeks

(make sure to complete each activity in the lessons)

Unit 1: Number Sense 1-20, Lesson 1: Numbers 1-5:

* Develop a plan for counting
* Use manipulatives and graphic organizers to show number values and solve problems
* Recognize the quantity of objects with corresponding numeral
* Write numbers 1-5 symbolically, numerically, and in word form
* Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.

Unit 1: Number Sense 1-20, Lesson 2: Numbers 1-5: Number Bonds

* Develop a plan for counting,
* Use manipulatives and graphic organizers to show number values and solve problems

Unit 1: Number Sense 1-20, Lesson 3: Ordering and Comparing

* Order objects and numbers 1 through 5
* Compare objects and numbers 1-5

Unit 1: Number Sense 1-20, Lesson 4: Numbers 6-10

* Develop a plan for counting,
* Use manipulatives and graphic organizers to show number values and solve problems
* Recognize the quantity of objects with corresponding numeral
* Write numbers 6-10 symbolically, numerically, and in word form
* Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.

Unit 1: Number Sense 1-20, Lesson 5: Numbers 6-10: Number Bonds and Making 10

* Use manipulatives and graphic organizers to show number values and solve problems
* Show ways to make 10
* Order objects and numbers 6 through 10
* Compare objects and numbers 6-10

Unit 1: Number Sense 1-20, Lesson 6: Numbers 11-15

* Develop a plan for counting
* Use manipulatives and graphic organizers to show number values and solve problems
* Recognize the quantity of objects with corresponding numeral
* Write numbers 11-20 symbolically, numerically, and in word form
* Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.
* Decompose numbers 11-20 to show that they are made up of 10 and other ones
* Count and show money amounts using pennies, nickels, and dimes

Unit 1: Number Sense 1-20, Lesson 7: Numbers 16-20

* Develop a plan for counting
* Use manipulatives and graphic organizers to show number values and solve problems
* Recognize the quantity of objects with corresponding numeral
* Write numbers 11-20 symbolically, numerically, and in word form
* Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.

Unit 1: Number Sense 1-20, Lesson 8: Reviewing Numbers 11-20

* Develop a plan for counting
* Use manipulatives and graphic organizers to show number values and solve problems
* Recognize the quantity of objects with corresponding numeral
* Write numbers 11-20 symbolically, numerically, and in word form
* Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.
* Decompose numbers 11-20 to show that they are made up of 10 and other ones
* Count and show money amounts using pennies, nickels, and dimes

Unit 1: Number Sense 1-20, Lesson 9: Numbers 1-20: Ordering and Comparing

* Order objects and numbers 1 through 20
* Compare objects and numbers 1 through 20

Unit 1: Number Sense 1-20, Lesson 10: Numbers 1-2: Patterns and Skip Counting

* Identify and create patterns
* Count by 2s and 5s to 20

Unit 1: Number Sense 1-20, Final Project: My Math Game

* Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.
* Order and compare numbers 1 through 20
* Use graphic organizers to show number values
* Count and show money amounts using pennies, nickels, and dimes
* Count by 2s and 5s from any number

Unit 2: Geometry, Lesson 1: What are Attributes?

* Understand and identify attributes

Unit 2: Geometry, Lesson 2: Some Great Shapes

* Distinguish between defining attributes versus non-defining attributes
* Build and draw shapes that possess defining attributes

Unit 2: Geometry, Lesson 3: More Work with Shapes

* Describe the parts of shapes
* Identify shapes based on their parts
* Use shapes to create composite shapes
* Use and write ordinal numbers

Unit 2: Geometry, Lesson 4: Circles

* Partition circles and rectangles into two and four equal shares
* Describe equal shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of
* Describe the whole as two of or four of the shares
* Understand that dividing a whole into more equal shares creates smaller shares

Unit 2: Geometry, Lesson 5: Dividing More Shapes

* Partition circles and rectangles into two and four equal shares
* Describe equal shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of
* Describe the whole as two of or four of the shares
* Understand that dividing a whole into more equal shares creates smaller shares

Unit 2: Geometry, Lesson 6: Shape Play

* Partition circles and rectangles into two and four equal shares
* Describe equal shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of
* Describe the whole as two of or four of the shares
* Understand that dividing a whole into more equal shares creates smaller shares

Unit 2: Geometry, Lesson 7: 3D Shapes

* Identify 3D shapes
* Compose 3D shapes to create composite shapes

Unit 2: Geometry, Final Project: Shape of Things Museum

* Identify 2D and 3D shapes
* List the attributes of 2D and 3D shapes
* Compose 2D and 3D shapes that have defining attributes

Unit 3: Addition and Subtraction to 10, Lesson 1: Getting Ready to Add and Subtract

* Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.
* Relate counting on a number line to adding and subtracting

Unit 3: Addition and Subtraction to 10, Lesson 2: What Are = and 0?

* Understand the meaning of the equal sign
* Understand the value of zero in math
* Count, read, and write to 120

Unit 3: Addition and Subtraction to 10, Lesson 3: Getting on Board with Addition

* Use addition and subtraction within 20 to solve word problems
* Add and subtract within 20, demonstrating fluency with addition and subtraction within 10
* Determine the unknown whole number in an addition or subtraction equation relating three whole numbers
* Use a variety of problem solving strategies
* Count, read, and write to 120, starting at any number less than 120

Unit 3: Addition and Subtraction to 10, Lesson 4: More Practice with Addition

* Use addition and subtraction within 20 to solve word problems
* Apply properties of operations as strategies to add and subtract
* Add and subtract within 20, demonstrating fluency with addition and subtraction within 10
* Determine if equations involving addition and subtraction are true or false
* Understand the meaning of the equal sign

Unit 3: Addition and Subtraction to 10, Lesson 5: Finding Differences

* Use addition and subtraction within 20 to solve word problems
* Understand subtraction as an unknown addend problem
* Add and subtract within 20, demonstrating fluency with addition and subtraction within 10
* Count, read, and write to 120, starting at any number less than 120

Unit 3: Addition and Subtraction to 10, Lesson 6: Adding and Subtracting to Solve Problems

* Use addition and subtraction within 20 to solve word problems
* Use a variety of problem solving strategies
* Count, read, and write to 120, starting at any number less than 120
* Count by 10s

Unit 3: Addition and Subtraction to 10, Final Project: My Sticker Book

* Use addition and subtraction within 20 to solve word problems

Unit 4: Data and Graphing, Lesson 1: What is Data?

* Collect data

Unit 4: Data and Graphing, Lesson 2: Tally Sticks and Tally Marks

* Collect, organize, and represent data
* Interpret data from charts and graphs
* Asks and answer questions about data

Unit 4: Data and Graphing, Lesson 3: Pictographs

* Collect, organize, and represent data
* Interpret data from charts and graphs
* Asks and answer questions about data

Unit 4: Data and Graphing, Lesson 4 Bar Graphs

* Collect, organize, and represent data
* Interpret data from charts and graphs
* Asks and answer questions about data

Unit 4: Data and Graphing, Lesson 5: More Graphing Practice

* Collect, organize, and represent data
* Asks and answer questions about data

Unit 4: Data and Graphing, Final Project: The Animal shelter Newsletter

* Organize and represent data

Unit 5: Addition and Subtraction to 20, Lesson 1: Addition and Subtraction Review

* Add and subtract within 20
* Determine the unknown whole number in an addition or subtraction equation relating three whole numbers

Unit 5: Addition and Subtraction to 20, Lesson2: More About Addition

* Add and subtract within 20
* Apply properties of operations as strategies to add and subtract

Unit 5: Addition and Subtraction to 20, Lesson 3: Adding to 20

* Add and subtract within 20
* Apply properties of operations as strategies to add and subtract
* Create number bonds
* Use strategies such as making 10 and creating equivalent but easier or known sums to add

Unit 5: Addition and Subtraction to 20, Lesson 4: More Adding to 20

* Add and subtract within 20
* Apply properties of operations as strategies to add and subtract
* Use strategies such as making 10 and creating equivalent but easier or known sums to add

Unit 5: Addition and Subtraction to 20, Lesson 5: Addition Games and Crafts

* Add and subtract within 20
* Apply properties of operations as strategies to add and subtract
* Use strategies such as making 10 and creating equivalent but easier or known sums to add

Unit 5: Addition and Subtraction to 20, Lesson 6: Subtracting Within 20

* Add and subtract within 20
* Determine the unknown whole number in an addition or subtraction equation relating three whole numbers

Unit 5: Addition and Subtraction to 20, Lesson 7: Problem Solving with Addition and Subtraction

* Add and subtract within 20
* Apply properties of operations as strategies to add and subtract
* Determine the unknown number in an addition or subtraction equation relating three whole numbers
* Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions
* Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20

Unit 5: Addition and Subtraction to 20, Final Project: Numbers are Missing

* Add and subtract within 20
* Apply properties of operations as strategies to add and subtract
* Determine the unknown number in an addition or subtraction equation relating three whole numbers

Unit 6: Time, Lesson 1: What is Time?

* Define time
* Explain the importance of telling time
* Use vocabulary related to time
* Add and subtract within 20, demonstrating fluency for addition and subtraction within 10

Unit 6: Time, Lesson 2: So Many Hours in a Day!

* Tell and write time in hours and half hours using analog and digital clocks
* Match analog and digital times
* Relate time to daily activities
* Add and subtract within 20, demonstrating fluency for addition and subtraction within 10

Unit 6: Time, Lesson 3: Half Hours

* Tell and write time in hours and half hours using analog and digital clocks
* Sequence times
* Match analog and digital times
* Add and subtract within 20, demonstrating fluency for addition and subtraction within 10

Unit 6: Time, Lesson 4: More With Half Hours

* Tell and write time in hours and half hours using analog and digital clocks
* Sequence times
* Add and subtract within 20, demonstrating fluency for addition and subtraction within 10

Unit 6: Time, Lesson 5: More Work With Time

* Tell and write time in hours and half hours using analog and digital clocks
* Match analog and digital times
* Relate time to daily activities
* Add and subtract within 20, demonstrating fluency for addition and subtraction within 10

Unit 6: Time, Final Project: How to Spend the Perfect Day

* Tell and write time in hours and half hours using analog and digital clocks
* Match analog and digital times
* Relate time to daily activities

Unit 7: Place Value, Lesson 1: What Is the Base-10 System?

* Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.
* Understand that the two digits of a two-digit number represent amounts of tens and ones
* Understand that 10 can be thought of as a bundle of ten ones, called a “ten”
* Understand that the numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones

Unit 7: Place Value, Lesson 2: What Is Place Value?

* Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral
* Understand that the two digits of a two-digit number represent amounts of tens and ones
* Understand that 10 can be thought of as a bundle of ten ones, called a “ten”
* Understand that the numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones

Unit 7: Place Value, Lesson 3: Tens

* Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral
* Understand that the numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens
* Understand that 10 can be thought of as a bundle of ten ones, called a “ten”

Unit 7: Place Value, Lesson 4: Distinguishing Tens and Ones

* Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral
* Understand that 10 can be thought of as a bundle of ten ones, called a “ten”
* Understand that the two digits of a two-digit number represent amounts of tens and ones

Unit 7: Place Value, Lesson 5: Practice Time!

* Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral
* Understand that the two digits of a two-digit number represent amounts of tens and ones
* Add and subtract within 20, demonstrating fluency for addition and subtraction within 10

Unit 7: Place Value, Lesson 6: More Work With Tens and Ones

* Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral
* Understand that the two digits of a two-digit number represent amounts of tens and ones

Unit 7: Place Value, Lesson 7: Building Numbers Using Tens and Ones

* Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral
* Understand that the two digits of a two-digit number represent amounts of tens and ones

Unit 7: Place Value, Lesson 8: Reading 100!

* Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral

Unit 7: Place Value, Lesson 9: Playing With Bigger Numbers

* Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral
* Understand that the two digits of a two-digit number represent amounts of tens and ones
* Understand that the numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones)

Unit 7: Place Value, Lesson 10: More Work With 100

* Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral
* Understand that the numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones)

Unit 7: Place Value, Lesson 11: Sequencing Numbers

* Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral
* Sequence numbers 1-100

Unit 7: Place Value, Lesson 12: Comparing Numbers

* Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral
* Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <

Unit 7: Place Value, Lesson 13: 10 More and 10 Less

* Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral
* Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count

Unit 7: Place Value, Lesson 14: Working With Multiples of 10

* Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral
* Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count
* Add and subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90

Unit 7: Place Value, Lesson 15: More Practice With 10

* Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral
* Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count
* Add and subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90

Unit 7: Place Value, Final Project: Place Value BINGO!

* Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral
* Understand that the two digits of a two-digit number represents amounts of tens and ones

Unit 8: Measurement, Lesson 1: Introducing Measurement

* Discuss measurement words, measurement tools, and the purpose of measurement
* Order three objects by length

Unit 8: Measurement, Lesson 2: Getting Started With Length

* Order three objects by length
* Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps

Unit 8: Measurement, Lesson 3: More Work With Length

* Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps

Unit 8: Measurement, Lesson 4: Working With Height

* Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps
* Order objects by height

Unit 8: Measurement, Lesson 5: Working With Weight

* Compare weights of objects

Unit 8: Measurement, Lesson 6: Temperature

* Observe changes in temperature
* Identify objects that are hot and cold

Unit 8: Measurement, Lesson 7: Capacity/Volume

* Compare capacities of containers

Unit 8: Measurement, Lesson 8: Thinking More About Measurement

* Discuss measurement words, measurement tools, and the purpose of measurement

Unit 8: Measurement, Final Project: The Great Measurement Olympics

* Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps
* Measure time using a stopwatch

Unit 9: Addition to 100, Lesson 1: Some Base-10 Review

* Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral
* Add within 100
* Add and subtract within 20, demonstrating fluency for addition and subtraction within 10
* Determine the unknown whole number in an addition or subtraction equation relating three whole numbers
* Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false

Unit 9: Addition to 100, Lesson 2: Working With 10 Again

* Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10
* Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90

Unit 9: Addition to 100, Lesson 3: More Practice With Multiples of 10

* Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10
* Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90

Unit 9: Addition to 100, Lesson 4: Adding a Multiple of 10 to Any Number

* Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral
* Given a two-digit number, mentally find 10 more or 10 less than the number
* Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10

Unit 9: Addition to 100, Lesson 5: More Practice With Adding Multiples of 10

* Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10

Unit 9: Addition to 100, Lesson 6: More Addition With Two-Digit Numbers

* Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral
* Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10
* Add and subtract within 20, demonstrating fluency for addition and subtraction within 10

Unit 9: Addition to 100, Lesson 7: Composing 10 to Add

* Add and subtract within 20, demonstrating fluency for addition and subtraction within 10
* Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10
* Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten
* Determine the unknown whole number in an addition or subtraction equation relating three whole numbers
* Given a two-digit number, mentally find 10 more or 10 less than the number

Unit 9: Addition to 100, Lesson 8: More Composing 10 to Add

* Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10
* Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten
* Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false
* Given a two-digit number, mentally find 10 more or 10 less than the number

Unit 9: Addition to 100, Lesson 9: Adding to 100

* Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10
* Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten

Unit 9: Addition to 100, Final Project: Addition to 100 Go Fish!

* Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10
* Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten

Unit 10: Skills Review, Lesson 1: Reviewing Addition and Subtraction Within 20

* Add and subtract within 20, demonstrating fluency for addition and subtraction within 10
* Determine the unknown whole number in an addition or subtraction equation relating three while numbers
* Apply properties of operations as strategies to add and subtract
* Count by 2s, 5s, and 10s

Unit 10: Skills Review, Lesson 2: Reviewing Place Value

* Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral
* Understand that the two digits of a two-digit number represent amounts of tens and ones
* Understand that the numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones)

Unit 10: Skills Review, Lesson 3: Reviewing Large Numbers

* Compare two-digit numbers
* Given a two-digit number, mentally find 10 more or 10 less than the number

Unit 10: Skills Review, Lesson 4: Reviewing Addition to 100

* Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10
* Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten

Unit 10: Skills Review, Lesson 5: Reviewing Measurement

* Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end
* Order objects by length
* Tell and write times in hours and half hours using analog and digital clocks

Unit 10: Skills Review, Lesson 6: Reviewing Geometry

* Build and draw shapes to possess defining attributes
* Compose two dimensional shapes to create a composite shape
* Partition circles and rectangles into two and four equal shares, describe the shares using the words “halves,” “fourths,” and “quarters”