Grade 1

Key Areas of Focus for Grades K-2: Addition and subtraction-concepts, skills and problem solving

Expected Fluency: Add and Subtract within 10

Module	M1: Addition and Subtraction of Numbers to 10 and Fluency	M2: Place Value, Comparison, Addition and Subtraction of Numbers to 20	M3: Ordering and Expressing Length Measurements as Numbers	M4: Place Value, Comparison, Addition and Subtraction of Numbers to 40	M5: Identify, Compose, and Partition Shapes	M6: Place Value, Comparison, Addition and Subtraction of Numbers to 100
Duration	Quarter 1	Quarter 1 and 2	Quarter 2	Quarter 3	Quarter 3 and 4	Quarter 4
Common Core Standards	1.OA.1* 1.OA.2 1.OA.3 1.OA.4 1.OA.5 1.OA.6 1.OA.8 1.MD.2*	1.OA.1* 1.OA.2 1.OA.3 1.OA.4 1.OA.5 1.OA.6 1.OA.7 1.OA.8 1.NBT.2* 1.NBT.3	1.MD.1 1.MD.2* 1.MD.4	1.NBT.1 1.NBT.2* 1.NBT.3 1.NBT.4 1.NBT.5 1.NBT.6	1.MD.3 1.G.1 1.G.2 1.G.3	1.NBT.1 1.NBT.2* 1.NBT.3 1.NBT.4 1.NBT.5 1.NBT.6 1.MD.3
Instructional Strategies	Use the math workshop model and centers. Each module should be approached from by understanding the students' baseline first and then developing and selecting, engaging and hand-on activities to build deep understanding at developmentally appropriate levels. Where possible, provide models and visuals for students. Communicate with students using student friendly iCan statements developed and or adopted by the grade-level team. Include kinesthetic activities to deepen understanding while adding movement and play into the learning					
Assessment Formative	Daily, ongoing formative assessment strategies included in each module (ex. Activities, exit tickets, homework activities such as games, practice, and online learning, etc.)					
Assessment Interim	A Mid-Module assessment Task is provided for each module to address the first half of the student outcomes for each module An End of the Module Assessment Task is provided to address the student outcomes for the module as a whole					

Assessment Summative	Cross-Modular Assessment Tasks are provided periodically after multiple modules to address standards from several modules and to ensure that students are making important connections across major topics within this grade.

Key

GEOMETRY	NUMBER	NUMBER AND GEOMETRY, MEASUREMENT	FRACTIONS

Major Clusters are denoted with *
(Areas of intense focus, where students need fluent understanding and application of core concepts)

Common Core State Standards Addressed in Each Module

Module 1

Essential Questions
How are different strategies be helpful when solving a problem?
In what ways can operations (subtraction and addition) affect numbers?

Enduring Understandings
Students will understand how to represent and solve problems using addition and subtraction within 20. Students will begin to apply addition and subtraction to problems using an equation opening up their ability to begin to solve real-world problems.

I Can Statements – adapted from www.thecurriculumcorner.com

I Can Use Addition and Subtraction to Help Me Understand Math

- I can use strategies to solve addition word problems.
- I can use strategies to solve subtraction word problems.
- I can solve word problems by adding 3 whole numbers.
- I can use the commutative property of addition.

- I can use the associative property of addition.
- I can use an addition fact to help me answer a subtraction problem.
- I can count to help me add and subtract.
- I can add facts within 20.
- I can subtract facts within 20.
- I know what an equal sign means.
- I can tell if addition and subtraction equations are true or false.
- I can tell the missing number in an addition or subtraction problem.

Module 1: Addition and Subtraction of Numbers to 10 and Fluency

Represent and solve problems involving addition and subtraction.*

1.OA.1 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, e.g., by using objects, drawings and equations with a symbol for the unknown number to represent the problem.

1.OA.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

Understand and apply properties of operations and the relationship between addition and subtraction.*

1.OA.3 Apply properties of operations as strategies to add and subtract. Examples: If 8 + 3 = 11 is known, then 3 + 8 = 11 is also known. (Commutative property of addition.) To add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.)

1.OA.4 Understand subtraction as an unknown-addend problem. For example, subtract 10 – 8 by finding the number that makes 10 when added to 8.

Add and subtract within 20.*

1.OA.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).

1.OA.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 - 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).

Work with addition and subtraction equations.*

1.OA.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. *For example, which of the following equations are true and which are false? 6 = 6, 7 = 8 – 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2.*

1.OA.8 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. *For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = ? - 3, 6 + 6 = ?.*

Measure lengths indirectly and by iterating length units.*

1.MD.2 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. *Limit to contexts where the object being measured is spanned by a whole number of length units with no* gaps or overlaps.

Module 2

Essential Questions
How are different strategies be helpful when solving a problem?
In what ways can operations (subtraction and addition) affect numbers?
How can 10s be helpful when adding and subtracting?

Enduring Understandings

Students will understand how to represent and solve problems using addition and subtraction within 20. Students will begin to apply addition and subtraction to problems using an equation opening up their ability to begin to solve real-world problems.

I Can Statements – adapted from www.thecurriculumcorner.com

I Can Use Number Sense and Place Value to Help Me Understand Math

- I can tell how many tens and how many ones are in a number.

I Can Use Addition and Subtraction to Help Me Understand Math

- I can use strategies to solve addition word problems.
- I can use strategies to solve subtraction word problems.
- I can solve word problems by adding 3 whole numbers.
- I can use the commutative property of addition.
- I can use the associative property of addition.
- I can tell if addition and subtraction equations are true or false.

Module 2: Place Value, Comparison, Addition and Subtraction of Numbers to 20

Represent and solve problems involving addition and subtraction. *

1.OA.1 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, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

1.OA.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

Understand and apply properties of operations and the relationship between addition and subtraction. *

1.OA.3 Apply properties of operations as strategies to add and subtract. Examples: If 8 + 3 = 11 is known, then 3 + 8 = 11 is also known. (Commutative property of addition.) To add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.)

1.OA.4 Understand subtraction as an unknown-addend problem. For example, subtract 10 – 8 by finding the number that makes 10 when added to 8.

Add and Subtract within 20. *

1.OA.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).

1.OA.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 - 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13.).

Work with addition and subtraction equations. *

1.OA.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. *For example, which of the following equations are true and which are false? 6 = 6, 7 = 8 – 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2.*

1.OA.8 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. *For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = ? - 3, 6 + 6 = ?.*

Understand place value.*

1.NBT.2 Understand that the two digits of a two-digit number represent amounts of tens and ones.

Understand the following as special cases:

BPS Math Year at a Glance (Adapted from "A Story of Units" Curriculum Maps associated with the Eureka math program in Mathematics P-5).

pg. 6

a. 10 can be thought of as a bundle of ten ones – called a "ten."

b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.

1.NBT.3 Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.

BPS Math Year at a Glance (Adapted from "A Story of Units" Curriculum Maps associated with the Eureka math program in Mathematics P-5).

Module 3

Essential Questions
How can different strategies be helpful when solving a problem?
In what ways can operations (subtraction and addition) affect numbers?
How are 10s helpful when adding and subtracting? (bundles and 10 frames)
How can I compare and contrast objects to understand measurement?
In what ways organizing data be helpful when answering questions about size, length, and quantity?

Enduring Understandings
Students will understand how to represent and solve problems using addition and subtraction within 20. Students will begin to apply addition and subtraction to problems using an equation opening up their ability to begin to solve real-world problems.

Students will understand how to measure and use measurement to compare and contrast object size. Students are able to use models, data, and measurement tools to develop understanding of math applications.

I Can Statements – adapted from www.thecurriculumcorner.com

I Can Use Addition and Subtraction to Help Me Understand Math

- I can use strategies to solve addition word problems.
- I can use strategies to solve subtraction word problems.

I Can Use Measurement and Data to Help Me Understand Math

- I can tell the length of an object using whole numbers.
- I can organize data.
- I can understand data.
- I can ask and answer questions about data.

Module 3: Ordering and Expressing Length Measurements as Numbers

Measure lengths indirectly and by iterating length units. *

1.MD.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object.

1.MD.2 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. *Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.*

Represent and interpret data.

1.MD.4 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

Module 4

Essential Questions
What are efficient ways to count?
How does counting by tens and ones, help you count larger numbers? (Skip Counting)
What is place value?
How does a digit's position affect its value?
How can numbers be expressed and compared?
In what ways can numbers be composed and decomposed?

Enduring Understandings
Students will understand that a strong number sense to 100 that allows them to choose the most efficient strategy to problem solve.

I Can Statements – adapted from www.thecurriculumcorner.com

I Can Use Number Sense and Place Value to Help Me Understand Math

- I can count to 120.

BPS Math Year at a Glance (Adapted from "A Story of Units" Curriculum Maps associated with the Eureka math program in Mathematics P-5).

- I can tell how many tens and how many ones are in a number.
- I can find 10 more or 10 less in my head.

Module 4: Place Value, Comparison, Addition and Subtraction of Numbers to 40

Extend the counting sequence.*

1.NBT.1 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 place value.*

1.NBT.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:

a. 10 can be thought of as a bundle of ten ones – called a "ten."

c. 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).

1.NBT.3 Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.

Use place value understanding and properties of operations to add and subtract.*

1.NBT.4 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, using concrete models or drawings and strategies based on place value, properties of operations, and/or the

relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.

1.NBT.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.

1.NBT.6 Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Module 5

Essential Questions
How can plane and solid shapes be described?
What are the characteristics (attributes) of a shape?
How can circles, squares, and rectangles be divided (partitioned) into equal parts?
How are numbers used to show fractions?
How are portioned shapes used to show fractions?

Enduring Understandings
Students will gain an understanding of two-dimensional and three-dimensional shapes and the relationships between them. Students will observe, describe, compare, classify, represent, and build 2-D & 3-D shapes. They will learn to use geometric language to describe and identify important features of shapes. In addition, the students will divide shapes into equal parts and label the parts as ½ and ¼.

I Can Statements – adapted from www.thecurriculumcorner.com

I Can Use Geometry to Help Me Understand Math

- I can tell about shapes.
- I can build and draw shapes.

- I can make two-dimensional shapes.
- I can make three-dimensional shapes.
- I can use shapes to make new shapes.
- I can divide shapes into parts.

I Can Use Measurement and Data to Help Me Understand Math

- I can tell and write time in hours and half-hours using a clock.

Module 5: Identify, Compose, and Partition Shapes

Tell and write time and money.

1.MD.3 Tell and write time in hours and half-hours using analog and digital clocks. Recognize and identify coins, their names, and their value.

Reason with shapes and their attributes.

1.G.1 Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.

1.G.2 Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.

1.G.3 Partition circles and rectangles into two and four equal shares, describe the 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 for these examples that decomposing into more equal shares creates smaller shares.

Module 6

Essential Questions
What are efficient ways to count?
How does counting by tens and ones, help you count larger numbers? (Skip Counting, Bundles, 10 Frames)
What is place value?
How does a digit's position affect its value?
How can numbers be expressed and compared?
In what ways can numbers be composed and decomposed?

Enduring Understandings
Students will understand that a strong number sense to 100 that allows them to choose the most efficient strategy to problem solve.

I Can Statements – adapted from www.thecurriculumcorner.com

I Can Use Measurement and Data to Help Me Understand Math

- I can tell and write time in hours and half-hours using a clock.

I Can Use Number Sense and Place Value to Help Me Understand Math

- I can count to 120.
- I can tell how many tens and how many ones are in a number.
- I can compare two-digit numbers using <, =, and >.
- I can use manipulatives and pictures to help me solve problems within 100.
- I can use math strategies to help me solve problems within 100.
- I can find 10 more or 10 less in my head.
- I can subtract multiples of 10 under 100 and explain what I did.

Module 6: Place Value, Comparison, Addition and Subtraction of Numbers to 100

Extend the counting sequence. *

1.NBT.1 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 place value. *

1.NBT.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:

a. 10 can be thought of as a bundle of ten ones – called a "ten."

c. 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).

1.NBT.3 Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.

Use place value understanding and properties of operations to add and subtract. *

1.NBT.4 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, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.

1.NBT.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count: explain the reasoning used.

1.NBT.6 Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Tell and write time and money.

1.MD.3 Tell and write time in hours and half-hours using analog and digital clocks. Recognize and identify coins, their names, and their value.

Major Clusters are denoted with *
(Areas of intense focus, where students need fluent understanding and application of core concepts)

Primary Resources
1. Eureka Math Program
2. Context for Learning
3. Math Workshop Model
4. Do the Math
5. TenMarks

Essential Questions Defined: Essential questions are broad concepts asked in question form. They help guide the teacher in teaching the unit and designing their lesson plan. **We use the following five essential questions with all of our units**, in all of our grades, across all of our subjects (Adapted from Rick DuFour)
1. What do students need to know and be able to do?
2. How will we teach them?
3. How will we know if they know and are able to do?
4. What will we do if they don't?
5. What will we do if they already know and are able to do prior to a lesson or unit beginning?

Enduring Understandings Defined: Enduring understandings are statements that capture the important ideas that can be transferred to learning and doing beyond the classroom (Adapted from Grant Wiggins and Jay McTighe, *Understanding by Design*).

I Can Statements Defined:
What students should know and be able to do in student friendly language. These statements help empower students and engage students, allowing them to own their learning.