August 2020



Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives

### **Description**

Included here are the prerequisite concepts and skills necessary for students to learn grade level content based on the New Jersey Student Learning Standards in mathematics. This tool is intended to support educators in the identification of any gaps in conceptual understanding or skill that might exist in a student's understanding of mathematics standards. The organization of this document mirrors that of the mathematics instructional units, includes all grade level standards, and reflects a grouping of standards and student learning objectives.

The tables are divided into three columns. The first column contains the grade level standard and student learning objectives, which reflect the corresponding concepts and skills in that standard. The second column contains standards from prior grades and the corresponding learning objectives, which reflect prerequisite concepts and skills essential for student attainment of the grade level standard as listed on the left. Given that a single standard may reflect multiple concepts and skills, all learning objectives for a prior grade standard may not be listed. Only those prior grade learning objectives that reflect prerequisite concepts and skills important for attainment of the associated grade level standard is listed. The third column contains <a href="Student Achievement Partners' recommendations">Student Achievement Partners' recommendations</a> (SAP) for the 2020-21 school year regarding preserving or reducing time as compared to a typical academic year.

Content Emphases Key: 

: Major Cluster : Supporting Cluster : Additional Cluster

### **Unit 1: Place Value and Three Digit Addition and Subtraction Strategies**

Rationale for Unit Focus

The primary focus of Unit 1 is building place value understanding for three-digit numbers and working with numbers within 1000. Learners extend the counting sequence mastered in grade 1 to count within 1000. Learners build place value understanding for three-digit numbers, understanding that the three digits represent amounts of hundreds, tens, and ones.



Building upon grade 1 work adding within 100 using concrete models, drawings, and strategies, grade 2 learners use addition and subtraction within 100 to solve both one- and two-step word problems for a variety of situations. They use concrete models and drawings to develop conceptual understanding of addition and subtraction within 1000. The unit concludes as learners begin to explain why addition and subtraction strategies work, and pursue fluency for addition and subtraction within 20 using mental strategies.

Unit 1, Module A

| Standard and Student Learning Objectives   | Previous Grade(s) Standards and Student<br>Learning Objectives  | Instructional Considerations  SAP recommendation to preserve or reduce time in 20-21 as compared to a typical year   |
|--|---|--|
| 2.NBT.A.2 Count within 1000; skip-count by 5s, 10s, and 100s.  We are learning to/that  count within 1000 skip count by tens skip count by fives | <ul> <li>1.NBT.A.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.</li> <li>We have learned to/that</li> <li>count to 120</li> <li>represent objects with a written number in sets within 120 objects</li> </ul> | Emphasize the conceptual understanding of three-digit numbers (as detailed in 1.NBT.A.1).  Integrate lessons and practice on counting, reading/writing, and comparing numbers (2.NBT.A.2, 2.NBT.A.3, 2.NBT.A.4) into the work of place value.  Limit the amount of required student practice on counting by ones, reading/writing and comparing numbers.  Note: While the standards in cluster 2.NBT.A are Major Work of the Grade, during the 2020-21 school year, it is recommended that they receive lighter treatment. |



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|--|--|--|
| <ul> <li>2.NBT.A.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.</li> <li>We are learning to/that</li> <li>read numbers to 1000 using base-ten numerals</li> <li>write numbers to 1000 using base-ten numerals</li> </ul> | <ul> <li>1.NBT.A.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.</li> <li>We have learned to/that</li> <li>read numbers up to 120</li> <li>write numbers up to 120</li> </ul> | Emphasize the conceptual understanding of three-digit numbers (as detailed in 1.NBT.A.1).  Integrate lessons and practice on counting, reading/writing, and comparing numbers (2.NBT.A.2, 2.NBT.A.3, 2.NBT.A.4) into the work of place value.  Limit the amount of required student practice on counting by ones, reading/writing and comparing numbers.  Note: While the standards in cluster 2.NBT.A are Major Work of the Grade, during the 2020-21 school year, it is recommended that they receive lighter treatment. |



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|---|---|--|
| ■ 2.NBT.A.1 Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones.  a. 100 can be thought of as a bundle of ten tens — called a "hundred."  b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).  We are learning to/that  ■ use multiplication and division within 100 to solve word problems in situations involving: equal groups, arrays and measurement quantities  ■ use drawings and equations with a symbol for the unknown number to represent multiplication and division word problems within 100 | <ul> <li>1.NBT.B.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:</li> <li>a. 10 can be thought of as a bundle of ten ones — called a "ten."</li> <li>b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.</li> <li>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).</li> <li>We have learned to/that</li> <li>10 can be thought of as a bundle of ten ones called a "ten"</li> <li>the numbers 11 to 19 are made up of one ten and one, two, three, four, five, six, seven, eight, or nine ones</li> <li>in a two-digit number, one digit represents the amount of tens and the other digit represents the amount of ones</li> <li>the numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 are made up of some tens and 0 ones</li> </ul> | Emphasize the conceptual understanding of three-digit numbers (as detailed in 1.NBT.A.1).  Integrate lessons and practice on counting, reading/writing, and comparing numbers (2.NBT.A.2, 2.NBT.A.3, 2.NBT.A.4) into the work of place value.  Limit the amount of required student practice on counting by ones, reading/writing and comparing numbers.  Note: While the standards in cluster 2.NBT.A are Major Work of the Grade, during the 2020-21 school year, it is recommended that they receive lighter treatment. |



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| Standard and Student Learning Objectives   | Previous Grade(s) Standards and Student Learning Objectives  | Instructional Considerations  SAP recommendation to preserve or reduce time in 20-21 as compared to a typical year   |
|--|--|--|
| 2.NBT.A.2 Count within 1000; skip-count by 5s, 10s, and 100s.  We are learning to/that  skip count by hundreds   | <ul> <li>1.NBT.A.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.</li> <li>We have learned to/that</li> <li>count to 120</li> </ul>  | Emphasize the conceptual understanding of three-digit numbers (as detailed in 1.NBT.A.1).  Integrate lessons and practice on counting, reading/writing, and comparing numbers (2.NBT.A.2, 2.NBT.A.3, 2.NBT.A.4) into the work of place value.  Limit the amount of required student practice on counting by ones, reading/writing and comparing numbers.  Note: While the standards in cluster 2.NBT.A are Major Work of the Grade, during the 2020-21 school year, it is recommended that they receive lighter treatment. |
| <ul> <li>2.NBT.A.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.</li> <li>We are learning to/that</li> <li>read numbers to 1000 using expanded form</li> <li>write numbers to 1000 using expanded form</li> </ul> | <ul> <li>1.NBT.A.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.</li> <li>We have learned to/that</li> <li>read numbers up to 120</li> <li>write numbers up to 120</li> <li>1.NBT.B.2 Understand that the two digits of a two-digit number represent amounts of tens</li> </ul> | Emphasize the conceptual understanding of three-digit numbers (as detailed in 1.NBT.A.1).  Integrate lessons and practice on counting, reading/writing, and comparing numbers (2.NBT.A.2, 2.NBT.A.3, 2.NBT.A.4) into the work of place value.  Limit the amount of required student practice on counting by ones, reading/writing and comparing numbers.   |



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|--|--|--|
|  | <ul> <li>and ones. Understand the following as special cases:</li> <li>a. 10 can be thought of as a bundle of ten ones — called a "ten."</li> <li>b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.</li> <li>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).</li> <li>We have learned to/that</li> <li>10 can be thought of as a bundle of ten ones called a "ten"</li> <li>the numbers 11 to 19 are made up of one ten and one, two, three, four, five, six, seven, eight, or nine ones</li> <li>in a two-digit number, one digit represents the amount of tens and the other digit represents the amount of ones</li> <li>the numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 are made up of some tens and 0 ones</li> </ul> | Note: While the standards in cluster 2.NBT.A are Major Work of the Grade, during the 2020-21 school year, it is recommended that they receive lighter treatmen.t |



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|--|---|--|
| <ul> <li>2.NBT.A.4 Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using &gt;, =, and &lt; symbols to record the results of comparisons.</li> <li>We are learning to/that</li> <li>compare two three-digit numbers using place value understanding and record the results using the symbols &gt;, =, &lt;</li> </ul> | <ul> <li>1.NBT.B.3 Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols &gt;, =, and &lt;.</li> <li>We have learned to/that</li> <li>compare two two-digit numbers using the meanings of the tens and ones digits</li> <li>compare two numbers using the symbols &lt;, &gt;, and =</li> </ul> | Emphasize the conceptual understanding of three-digit numbers (as detailed in 1.NBT.A.1).  Integrate lessons and practice on counting, reading/writing, and comparing numbers (2.NBT.A.2, 2.NBT.A.3, 2.NBT.A.4) into the work of place value.  Limit the amount of required student practice on counting by ones, reading/writing and comparing numbers.  Note: While the standards in cluster 2.NBT.A are Major Work of the Grade, during the 2020-21 school year, it is recommended that they receive lighter treatment. |



# Unit 1, Module B

| Standard and Student Learning Objectives   | Previous Grade(s) Standards and Student Learning Objectives  | Instructional Considerations  SAP recommendation to preserve or reduce time in 20-21 as compared to a typical year   |
|--|--|--|
| <b>2.0A.A.1</b> Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. | <b>1.0A.A.1</b> 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.  | Emphasize problems that involve sums less than or equal to 20 and/or the related differences in order to keep the focus on making sense of different problem types.  Assign fewer problems with sums greater than 20 or related differences. |
| <ul> <li>we are learning to/that</li> <li>represent a word problem with drawings and equations using a symbol for the unknown</li> <li>solve one and two-step addition and subtraction word problems within 20 involving situations of adding to, taking from, putting together, taking apart, and comparing</li> </ul>              | <ul> <li>represent a word problem using objects, drawings, or equations using a symbol for the unknown</li> <li>solve addition and subtraction word problems within 20 involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions</li> </ul>  |  |
|  | 1.NBT.C.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 (e.g., base ten blocks) 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 |  |



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|--|--|--|
|  | 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.  We have learned to/that  compose tens when adding two-digit numbers, if necessary  when adding two-digit numbers, one adds tens and tens, ones and ones  add a two-digit number and a one-digit number within 100 using concrete models (e.g., base ten blocks) or drawings  add a two-digit number and a one-digit number within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction  add a two-digit number and a multiple of 10, within 100, using concrete models (e.g., base ten blocks) or drawings  add a two-digit number and a multiple of 10, within 100, using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction |  |



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|---|---|--|
|   | 1.NBT.C.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.  |  |
|   | <ul> <li>subtract multiples of 10 from multiples of 10 using concrete models or drawings (multiples of 10 less than or equal to 90)</li> <li>subtract multiples of 10 from multiples of 10 using strategies based on place value or properties of operations (multiples of 10 less than or equal to 90)</li> <li>explain the reasoning used when subtracting multiples of 10 from multiples of 10 (multiples of 10 less than or equal to 90)</li> </ul> |  |
| <b>2.NBT.B.7</b> Add and subtract within 1000, 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. Understand that in adding or | <b>1.NBT.C.4</b> 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 (e.g., base ten blocks) or drawings and strategies based on place value, properties of operations, and/or the  | Prioritize strategies based on place value in written work to strengthen the progression toward fluency with multi-digit addition and subtraction. |



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|--|--|--|
| subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.  We are learning to/that  when adding and subtracting three-digit numbers, only digits in the same place value can be added or subtracted to or from each other  when adding and subtracting three-digit numbers, sometimes it is necessary to compose or decompose tens and/or hundreds  use concrete models and a place value strategy to add and subtract within 1000, and relate the written strategy to the model  use drawings and a place value strategy to add and subtract within 1000, and relate the written strategy to the drawing  use concrete models and a strategy based on properties of operations and/or the relationship between addition and subtraction to add and subtract within 1000, and relate the written strategy to the model | 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.  We have learned to/that  compose tens when adding two-digit numbers, if necessary  when adding two-digit numbers, one adds tens and tens, ones and ones  add a two-digit number and a one-digit number within 100 using concrete models (e.g., base ten blocks) or drawings  add a two-digit number and a one-digit number within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction  add a two-digit number and a multiple of 10, within 100, using concrete models (e.g., base ten blocks) or drawings  add a two-digit number and a multiple of 10, within 100, using strategies based on place value, properties of operations, | Incorporate foundational work on addition and subtraction within 100 from grade 1 (1.NBT.C) to support the addition and subtraction work of grade 2.  Note that grade 2 students are not expected to be fluent with three-digit sums and differences; repetitive fluency exercises are not required. |



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|--|--|--|
| <ul> <li>use drawings and a strategy based on properties of operations and/or the relationship between addition and subtraction to add and subtract within 1000, and relate the written strategy to the drawing</li> </ul> | <ul> <li>and/or the relationship between addition and subtraction</li> <li>1.NBT.C.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.</li> <li>We have learned to/that</li> <li>subtract multiples of 10 from multiples of 10 using concrete models or drawings (multiples of 10 less than or equal to 90)</li> <li>subtract multiples of 10 from multiples of 10 using strategies based on place value or properties of operations (multiples of 10 less than or equal to 90)</li> <li>explain the reasoning used when subtracting multiples of 10 from multiples of 10 (multiples of 10 less than or equal to 90)</li> </ul> |  |



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|--|---|--|
| <ul> <li>2.NBT.B.8 Mentally add 10 or 100 to a given number 100 – 900, and mentally subtract 10 or 100 from a given number 100 – 900.</li> <li>We are learning to/that</li> <li>mentally add or subtract 10 to or from any given number between 100 and 900</li> <li>mentally add or subtract 100 to or from any given number between 100 and 900</li> </ul> | <ul> <li>1.NBT.C.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.</li> <li>We have learned to/that</li> <li>mentally find 10 more or 10 less than any given two-digit number, without having to count</li> <li>explain how to mentally find 10 more or 10 less than any given two-digit number</li> </ul> | Prioritize strategies based on place value in written work to strengthen the progression toward fluency with multi-digit addition and subtraction.  Incorporate foundational work on addition and subtraction within 100 from grade 1 (1.NBT.C) to support the addition and subtraction work of grade 2.  Note that grade 2 students are not expected to be fluent with three-digit sums and differences; repetitive fluency exercises are not required. |



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|--|--|--|
| <ul> <li>2.NBT.B.9 Explain why addition and subtraction strategies work, using place value and the properties of operation.</li> <li>We are learning to/that</li> <li>explain why addition and subtraction strategies work based on place value</li> <li>explain why addition and subtraction strategies work based on properties of operations</li> </ul> | <ul> <li>■ 1.OA.B.3 Apply properties of operations as strategies to add and subtract.3 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.) {Students need not use formal terms for these properties}</li> <li>We have learned to/that</li> <li>■ apply the commutative and identity properties as strategies to add and subtract</li> <li>■ 1.OA.B.4 Understand subtraction as an unknown-addend problem. For example, subtract 10 -8 by finding the number that makes 10 when added to 8.</li> <li>We have learned to/that</li> <li>■ subtraction can be thought of as an addition problem with an unknown addend</li> <li>■ a related addition problem can be used to solve a subtraction problem</li> </ul> | Prioritize strategies based on place value in written work to strengthen the progression toward fluency with multi-digit addition and subtraction.  Incorporate foundational work on addition and subtraction within 100 from grade 1 (1.NBT.C) to support the addition and subtraction work of grade 2.  Note that grade 2 students are not expected to be fluent with three-digit sums and differences; repetitive fluency exercises are not required. |



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| <ul> <li>2.OA.B.2 Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.</li> <li>We are learning to/that</li> <li>know from memory all sums of two one-digit numbers within ten</li> <li>add and subtract within 20 using mental strategies, working towards accuracy and efficiency</li> </ul> | <ul> <li>■ 1.OA.C.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).</li> <li>We have learned to/that</li> <li>■ add and subtract within 20 using strategies such as counting on, making ten, and decomposing a number leading to a ten</li> <li>■ add and subtract within 20 using strategies such as relationship between addition and subtraction, and using easier or known sums within 10</li> <li>■ working towards accuracy and efficiency for addition and subtraction within 10,</li> </ul> | Incorporate additional practice on the grade 1 fluency of adding and subtracting within 10 (1.OA.C.6) early in the school year to support the addition and subtraction work of grade 2 (2.OA). |
|   | use efficient strategies to add and subtract within 20   |  |

November 2020



Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives

### **Description**

Included here are the prerequisite concepts and skills necessary for students to learn grade level content based on the New Jersey Student Learning Standards in mathematics. This tool is intended to support educators in the identification of any gaps in conceptual understanding or skill that might exist in a student's understanding of mathematics standards. The organization of this document mirrors that of the mathematics instructional units, includes all grade level standards, and reflects a grouping of standards and student learning objectives.

The tables are divided into three columns. The first column contains the grade level standard and student learning objectives, which reflect the corresponding concepts and skills in that standard. The second column contains standards from prior grades and the corresponding learning objectives, which reflect prerequisite concepts and skills essential for student attainment of the grade level standard as listed on the left. Given that a single standard may reflect multiple concepts and skills, all learning objectives for a prior grade standard may not be listed. Only those prior grade learning objectives that reflect prerequisite concepts and skills important for attainment of the associated grade level standard is listed. The third column contains <a href="Student Achievement Partners">Student Achievement Partners</a> recommendations (SAP) for the 2020-21 school year regarding preserving or reducing time as compared to a typical academic year.

Content Emphases Key: 

: Major Cluster : Supporting Cluster : Additional Cluster

**Unit 2: Counting, Addition and Subtraction Strategies** 

#### **Rationale for Unit Focus**

Continuing the counting sequence of Unit 1, learners skip count by hundreds and continue to develop skills counting within 1000. They partition rectangle into rows and columns of same-size squares and skip count to find the total. Learners use repeated addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns, laying the foundation for multiplication in grade 3. They tell and write time to the nearest five minutes, building on their grade 1 work telling and writing time in hours and half-hours.



The major focus of Unit 2 is reinforcing addition and subtraction concepts in a variety of contexts. Learners are introduced to money concepts and solve word problems involving dollar bills, quarters, dimes, nickels, and pennies. They solve one- and two-step word problems, add up to four two-digit numbers, pursue fluency for addition and subtraction within 20 using mental strategies, and pursue fluency for addition and subtraction within 100 using various strategies such as properties of operations.

**Note:** Double asterisks (\*\*) indicate that the example(s) included within the New Jersey Student Learning Standard may be especially informative when considering the Student Learning Objective.

Unit 2, Module A

| Standard and Student Learning Objectives   | Previous Grade(s) Standards and Student<br>Learning Objectives   | Instructional Considerations  SAP recommendation to preserve or reduce time in 20-21 as compared to a typical year   |
|--|--|--|
| ■ 2.NBT.A.2 Count within 1000; skip-count by 5s, 10s, and 100s.  We are learning to/that  ■ count within 1000  ■ skip count by tens  ■ skip count by fives  ■ skip count by hundreds | ■ 1.NBT.A.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. We have learned to/that  ■ count to 120 | Emphasize the conceptual understanding of three-digit numbers (as detailed in 1.NBT.A.1).  Integrate lessons and practice on counting, reading/writing, and comparing numbers (2.NBT.A.2, 2.NBT.A.3, 2.NBT.A.4) into the work of place value.  Limit the amount of required student practice on counting by ones, reading/writing and comparing numbers.  Note: While the standards in cluster 2.NBT.A are Major Work of the grade, during the 2020-21 school year, it is recommended that they receive lighter treatment. |
| 2.G.A.2 Partition a rectangle into rows<br>and columns of same-size squares and count<br>to find the total number of them.   | • 1.G.A.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                        | Combine lessons to address key concepts on reasoning with shapes and their attributes in order to reduce the amount of time spent on this cluster.   |

**Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives** 

| Standard and Student Learning Objectives   | Previous Grade(s) Standards and Student<br>Learning Objectives  | Instructional Considerations <u>SAP</u> recommendation to preserve or reduce time in 20-21 as compared to a typical year |
|--|---|--|
| <ul> <li>We are learning to/that</li> <li>partition a rectangle into rows and columns of same-size squares and count to find the total number of same size squares</li> </ul>  | 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  We have learned to/that  | Limit the amount of required student practice.   |
|  | <ul> <li>partition means to split a shape into smaller parts, also called shares</li> <li>partition circles and rectangles into two equal shares and describe each share using the word "halves" or the phrase "half of"</li> <li>partition circles and rectangles into four equal shares and describe each share using the word "fourths" or the phrase "fourth of"</li> <li>decomposing shapes into more equal shares creates smaller shares</li> </ul> |  |
| 2.OA.C.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.  We are learning to/that | <b>1.0A.D.7</b> 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? $6 = 6$ , $7 = 8 - 1$ , $5 + 2 = 2 + 5$ , $4 + 1 = 5 + 2$   | Limit lessons on foundations for multiplication.   |
| <ul> <li>use repeated addition to find the total<br/>number of objects arranged in</li> </ul>  | <ul><li>We have learned to/that</li><li>determine if equations involving addition and subtraction within 20 are</li></ul>   |  |



**Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives** 

| Standard and Student Learning Objectives   | Previous Grade(s) Standards and Student<br>Learning Objectives  | Instructional Considerations <u>SAP</u> recommendation to preserve or reduce time in 20-21 as compared to a typical year   |
|--|---|--|
| rectangular arrays with up to 5 rows and up to 5 columns  write an equation to express the total number of objects arranged in a rectangular array as a sum of equal addends   | true or false using the meaning of the equal sign   |  |
| <ul> <li>2.OA.C.3 Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.</li> <li>We are learning to/that</li> <li>determine whether a group of objects up to 20 is odd or even (e.g., by pairing objects, counting them by 2s)</li> <li>write an equation to express an even number as a sum of two equal addends</li> </ul> | <ul> <li>■ 1.OA.D.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</li> <li>We have learned to/that</li> <li>■ determine if equations involving addition and subtraction within 20 are true or false using the meaning of the equal sign</li> </ul> | Limit lessons on foundations for multiplication.   |
| <ul> <li>2.MD.C.7 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.</li> <li>We are learning to/that</li> <li>use analog and digital clocks to tell time to the nearest five minutes using a.m. and p.m.</li> </ul>  | <ul> <li>1.MD.B.3 Tell and write time in hours and half-hours using analog and digital clocks</li> <li>We have learned to/that</li> <li>tell and write time to the hour using analog and digital clocks</li> <li>tell and write time to the half-hour using analog and digital clocks</li> </ul>  | Combine lessons in order to reduce the amount of time spent on time and money.  Emphasize denominations that support place value understanding such as penny-dimedollar.  Limit the amount of required student practice. |



**Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives** 

| Standard and Student Learning Objectives   | Previous Grade(s) Standards and Student  | Instructional Considerations  |
|--|--|---|
|  | Learning Objectives  | SAP recommendation to preserve or reduce time in 20-21 as compared to a typical year  |
| ■ 2.MD.C.8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?  We are learning to/that  ■ determine the total amount of money by counting combinations of dollar bills, quarters, dimes, nickels, and pennies using the \$ and ¢ symbols appropriately  ■ solve word problems involving dollar bills, quarters, dimes, nickels, and pennies using the \$ and ¢ symbols appropriately  appropriately | ■ 1.NBT.C.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 (e.g., base ten blocks) 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.  We have learned to/that  ■ add a two-digit number and a one-digit number within 100 using concrete models (e.g., base ten) or drawings  ■ add a two-digit number and a one-digit number within 100 using strategies based on place value or properties of operations  ■ add a two-digit number and a multiple of 10, within 100, using concrete models (e.g., base ten blocks) or drawings  ■ add a two-digit number and a multiple of 10, within 100, using strategies based on place value or properties of operations | Combine lessons in order to reduce the amount of time spent on time and money. Emphasize denominations that support place value understanding such as penny-dimedollar.  Limit the amount of required student practice. |



Unit 2, Module B

| Standard and Student Learning Objectives   | Previous Grade(s) Standards and Student Learning Objectives   | Instructional Considerations <u>SAP</u> recommendation to preserve or reduce time in 20-21 as compared to a typical year   |
|--|---|--|
| <ul> <li>2.OA.B.2 Fluently add and subtract within 20 using mental strategies. By end of grade 2, know from memory all sums of two one-digit numbers.</li> <li>We are learning to/that</li> <li>add and subtract within 20 using mental strategies, working towards accuracy and efficiency</li> </ul> | ■ 1.OA.C.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). We have learned to/that | Incorporate additional practice on the grade 1 fluency of adding and subtracting within 10 (1.OA.C.6) early in the school year to support the addition and subtraction work of grade 2 (2.OA). |
|  | <ul> <li>add and subtract within 20 using strategies such as counting on, making ten, and decomposing a number leading to a ten</li> <li>add and subtract within 20 using strategies such as relationship between addition and subtraction, and using easier or known sums within 10</li> <li>working towards accuracy and efficiency for addition and subtraction within 10, use efficient strategies to add and subtract within 20</li> </ul>   |  |



**Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives** 

| Standard and Student Learning Objectives              | Previous Grade(s) Standards and Student  | Instructional Considerations   |
|---|--|--|
|   | Learning Objectives  | <u>SAP</u> recommendation to preserve or reduce                                    |
|   |  | time in 20-21 as compared to a typical year  |
| 2.NBT.B.5 Fluently add and subtract                   | <b>1.NBT.C.4</b> Add within 100, including   | Prioritize strategies based on place value in                                      |
| within 100 using strategies based on place            | adding a two-digit number and a one-digit  | written work to strengthen the progression   |
| value, properties of operations, and/or the           | number, and adding a two-digit number and  | toward fluency with multi-digit addition and                                       |
| relationship between addition and                     | a multiple of 10, using concrete models  | subtraction.   |
| subtraction.  | (e.g., base ten blocks) or drawings and  | Incorporate foundational work on addition  |
| We are learning to/that                               | strategies based on place value, properties  | and subtraction within 100 from grade 1  |
| <ul> <li>add and subtract within 100 using</li> </ul> | of operations, and/or the relationship   | (1.NBT.C) to support the addition and  |
| strategies based on place value,                      | between addition and subtraction; relate   | subtraction work of grade 2.   |
| properties of operations, and/or the                  | the strategy to a written method and explain the reasoning used. Understand that   | Note that grade 2 students are not expected to be fluent with three-digit sums and |
| relationship between addition and                     | in adding two-digit numbers, one adds tens   | differences; repetitive fluency exercises are                                      |
| subtraction working towards accuracy                  | and tens, ones and ones; and sometimes it  | not required.  |
| and efficiency  | is necessary to compose a ten.   | not required.  |
|   | ·  |  |
|   | We have learned to/that  |  |
|   | <ul><li>compose tens when adding two-digit</li></ul>                               |  |
|   | numbers, if necessary  |  |
|   | <ul><li>when adding two-digit numbers, one</li></ul>                               |  |
|   | adds tens and tens, ones and ones  |  |
|   | add a two-digit number and a one-digit   |  |
|   | number within 100 using strategies based   |  |
|   | on place value, properties of operations, and/or the relationship between addition |  |
|   | and subtraction  |  |
|   | <ul> <li>add a two-digit number and a multiple of</li> </ul>                       |  |
|   | 10, within 100, using strategies based on  |  |
|   | place value, properties of operations,   |  |



**Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives** 

| Standard and Student Learning Objectives  | Previous Grade(s) Standards and Student Learning Objectives  | Instructional Considerations  SAP recommendation to preserve or reduce time in 20-21 as compared to a typical year   |
|---|--|--|
|   | and/or the relationship between addition and subtraction   |  |
|   | <ul> <li>1.NBT.C.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.</li> <li>We have learned to/that</li> <li>subtract multiples of 10 from multiples of 10 using strategies based on place value or properties of operations (multiples of</li> </ul> |  |
|   | 10 less than or equal to 90)   |  |
| 2.NBT.B.6 Add up to four two-digit<br>numbers using strategies based on place<br>value and properties of operations.<br>We are learning to/that | <b>1.NBT.C.4</b> 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   | Prioritize strategies based on place value in written work to strengthen the progression toward fluency with multi-digit addition and subtraction.   |
| <ul> <li>add up to four two-digit numbers using<br/>place value strategies and properties of<br/>operations</li> </ul>                          | (e.g., base ten blocks) 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   | Incorporate foundational work on addition and subtraction within 100 from grade 1 (1.NBT.C) to support the addition and subtraction work of grade 2.  Note that grade 2 students are not expected to be fluent with three-digit sums and |



**Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives** 

| Standard and Student Learning Objectives  | Previous Grade(s) Standards and Student Learning Objectives  | Instructional Considerations  SAP recommendation to preserve or reduce time in 20-21 as compared to a typical year   |
|---|--|--|
|   | in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.  We have learned to/that   | differences; repetitive fluency exercises are not required.  |
|   | <ul> <li>when adding two-digit numbers, one adds tens and tens, ones and ones</li> <li>add a two-digit number and a one-digit number within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction</li> <li>add a two-digit number and a multiple of 10, within 100, using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction</li> </ul> |  |
| <b>2.0A.A.1</b> Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.  We are learning to/that | ■ 1.OA.A.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.  We have learned to/that  | Emphasize problems that involve sums less than or equal to 20 and/or the related differences in order to keep the focus on making sense of different problem types.  Assign fewer problems with sums greater than 20 or related differences. |



**Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives** 

| Standard and Student Learning Objectives   | Previous Grade(s) Standards and Student<br>Learning Objectives  | Instructional Considerations  SAP recommendation to preserve or reduce time in 20-21 as compared to a typical year |
|--|---|--|
| <ul> <li>represent a word problem with drawings and equations using a symbol for the unknown</li> <li>solve one and two-step addition and subtraction word problems within 20 involving situations of adding to, taking from, putting together, taking apart, and comparing</li> </ul> | <ul> <li>represent a word problem using objects, drawings, or equations using a symbol for the unknown</li> <li>solve addition and subtraction word problems within 20 involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions</li> </ul> |  |



February 2021



Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives

### **Description**

Included here are the prerequisite concepts and skills necessary for students to learn grade level content based on the New Jersey Student Learning Standards in mathematics. This tool is intended to support educators in the identification of any gaps in conceptual understanding or skill that might exist in a student's understanding of mathematics standards. The organization of this document mirrors that of the mathematics instructional units, includes all grade level standards, and reflects a grouping of standards and student learning objectives.

The tables are divided into three columns. The first column contains the grade level standard and student learning objectives, which reflect the corresponding concepts and skills in that standard. The second column contains standards from prior grades and the corresponding learning objectives, which reflect prerequisite concepts and skills essential for student attainment of the grade level standard as listed on the left. Given that a single standard may reflect multiple concepts and skills, all learning objectives for a prior grade standard may not be listed. Only those prior grade learning objectives that reflect prerequisite concepts and skills important for attainment of the associated grade level standard is listed. The third column contains <a href="Student Achievement Partners">Student Achievement Partners</a> recommendations (SAP) for the 2020-21 school year regarding preserving or reducing time as compared to a typical academic year.

Content Emphases Key: : Major Cluster : Supporting Cluster : Additional Cluster

### **Unit 3: Measuring Length**

#### **Rationale for Unit Focus**

The major focus of Unit 3 is reinforcing addition and subtraction concepts and strategies. Learners continue to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing. They use concrete models and drawings to develop conceptual understanding of addition and subtraction within 1000 and again use repeated addition to find the total number of objects arranged in rectangular arrays to solidify the foundation for multiplication in grade 3.



Grade 1 learners measured objects by laying multiple copies of a shorter object and expressed the length of an object as a whole number of length units. In this unit, grade 2 learners measure the length of an object directly by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. They estimate, compare, and represent lengths on the number line. The unit concludes as learners use addition and subtraction within 100 to solve word problems involving lengths.

Unit 3, Module A

| Standard and Student Learning Objectives  | Previous Grade(s) Standards and Student   | Instructional Considerations                         |
|---|---|--|
|   | Learning Objectives   | <u>SAP</u> recommendation to preserve or reduce time |
|   |   | in 20-21 as compared to a typical year               |
| <b>2.OA.A.1</b> Use addition and subtraction  | <b>1.0A.A.1</b> Use addition and subtraction  | Emphasize problems that involve sums less            |
| within 100 to solve one- and two-step word  | within 20 to solve word problems involving  | than or equal to 20 and/or the related               |
| problems involving situations of adding to,   | situations of adding to, taking from, putting   | differences in order to keep the focus on            |
| taking from, putting together, taking apart,  | together, taking apart, and comparing, with   | making sense of different problem types.             |
| and comparing, with unknowns in all   | unknowns in all positions, e.g., by using   | Assign fewer problems with sums greater              |
| positions, e.g., by using drawings and  | objects, drawings, and equations with a   | than 20 or related differences.                      |
| equations with a symbol for the unknown   | symbol for the unknown number to  |  |
| number to represent the problem.  | represent the problem.  |  |
| We are learning to/that   | We have learned to/that   |  |
| <ul> <li>represent a word problem with drawings and equations using a symbol for the unknown</li> <li>solve one and two-step addition and subtraction word problems within 100 involving situations of adding to, taking from, putting together, taking apart, and comparing</li> </ul> | <ul> <li>represent a word problem using objects, drawings, or equations using a symbol for the unknown</li> <li>solve addition and subtraction word problems within 20 involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions</li> </ul> |  |
|   | <b>1.NBT.C.4</b> Add within 100, including adding a two-digit number and a one-digit  |  |
|   | number, and adding a two-digit number and   |  |



**Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives** 

| Standard and Student Learning Objectives | Previous Grade(s) Standards and Student  | Instructional Considerations                         |
|--|--|--|
|  | Learning Objectives  | <u>SAP</u> recommendation to preserve or reduce time |
|  |  | in 20-21 as compared to a typical year               |
|  | a multiple of 10, using concrete models  |  |
|  | (e.g., base ten blocks) 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.  |  |
|  | We have learned to/that  |  |
|  | <ul> <li>compose tens when adding two-digit numbers, if necessary</li> <li>when adding two-digit numbers, one adds tens and tens, ones and ones</li> <li>add a two-digit number and a one-digit number within 100 using concrete models (e.g., base ten blocks) or drawings</li> <li>add a two-digit number and a one-digit number within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction</li> <li>add a two-digit number and a multiple of</li> </ul> |  |
|  | 10, within 100, using concrete models (e.g., base ten blocks) or drawings  |  |



**Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives** 

| Standard and Student Learning Objectives | Previous Grade(s) Standards and Student  | Instructional Considerations                         |
|--|--|--|
|  | Learning Objectives  | <u>SAP</u> recommendation to preserve or reduce time |
|  |  | in 20-21 as compared to a typical year               |
|  | <ul> <li>add a two-digit number and a multiple of<br/>10, within 100, using strategies based on<br/>place value, properties of operations,<br/>and/or the relationship between addition<br/>and subtraction</li> </ul>   |  |
|  | 1.NBT.C.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. We have learned to/that     |  |
|  | <ul> <li>subtract multiples of 10 from multiples of 10 using concrete models or drawings (multiples of 10 less than or equal to 90)</li> <li>subtract multiples of 10 from multiples of 10 using strategies based on place value or properties of operations (multiples of 10 less than or equal to 90)</li> <li>explain the reasoning used when subtracting multiples of 10 from</li> </ul> |  |



**Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives** 

| Standard and Student Learning Objectives  | Previous Grade(s) Standards and Student<br>Learning Objectives  | Instructional Considerations  SAP recommendation to preserve or reduce time  |
|---|---|--|
|   | multiples of 10 (multiples of 10 less than or equal to 90)  | in 20-21 as compared to a typical year   |
| <ul> <li>2.NBT.B.7 Add and subtract within 1000, 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.     Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.     We are learning to/that     use concrete models and a place value strategy to add and subtract within 1000, and relate the written strategy to the model     use drawings and a place value strategy to add and subtract within 1000, and relate the written strategy to the drawing</li> </ul> | <ul> <li>1.NBT.C.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 (e.g., base ten blocks) 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.</li> <li>We have learned to/that</li> <li>add a two-digit number and a one-digit number within 100 using concrete models (e.g., base ten blocks) or drawings</li> </ul> | Prioritize strategies based on place value in written work to strengthen the progression toward fluency with multi-digit addition and subtraction.  Incorporate foundational work on addition and subtraction within 100 from grade 1 (1.NBT.C) to support the addition and subtraction work of grade 2.  Note that grade 2 students are not expected to be fluent with three-digit sums and differences; repetitive fluency exercises are not required. |



**Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives** 

| Standard and Student Learning Objectives  | Previous Grade(s) Standards and Student   | Instructional Considerations                         |
|---|---|--|
|   | Learning Objectives   | <u>SAP</u> recommendation to preserve or reduce time |
|   |   | in 20-21 as compared to a typical year               |
| <ul> <li>use concrete models and a strategy based on properties of operations and/or the relationship between addition and subtraction to add and subtract within 1000, and relate the written strategy to the model</li> <li>use drawings and a strategy based on properties of operations and/or the relationship between addition and subtraction to add and subtract within 1000, and relate the written strategy to the drawing</li> </ul> | <ul> <li>add a two-digit number and a one-digit number within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction</li> <li>add a two-digit number and a multiple of 10, within 100, using concrete models (e.g., base ten blocks) or drawings</li> <li>add a two-digit number and a multiple of 10, within 100, using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction</li> <li>1.NBT.C.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.</li> <li>We have learned to/that</li> </ul> |  |
|   | <ul> <li>subtract multiples of 10 from multiples of<br/>10 using concrete models or drawings<br/>(multiples of 10 less than or equal to 90)</li> </ul>  |  |



**Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives** 

| Standard and Student Learning Objectives   | Previous Grade(s) Standards and Student Learning Objectives  | Instructional Considerations  SAP recommendation to preserve or reduce time in 20-21 as compared to a typical year  |
|--|--|---|
|  | <ul> <li>subtract multiples of 10 from multiples of 10 using strategies based on place value or properties of operations (multiples of 10 less than or equal to 90)</li> <li>explain the reasoning used when subtracting multiples of 10 from multiples of 10 (multiples of 10 less than or equal to 90)</li> </ul>                      |   |
| <ul> <li>2.NBT.A.2 Count within 1000; skip-count by 5s, 10s, and 100s.</li> <li>We are learning to/that</li> <li>count within 1000</li> <li>skip count by tens</li> <li>skip count by fives</li> <li>skip count by hundreds</li> </ul> | <ul> <li>1.NBT.A.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.         We have learned to/that         <ul> <li>count to 120</li> <li>represent objects with a written number in sets within 120 objects</li> </ul> </li> </ul> | Emphasize the conceptual understanding of three-digit numbers (as detailed in 1.NBT.A.1).  Integrate lessons and practice on counting, reading/writing, and comparing numbers (2.NBT.A.2, 2.NBT.A.3, 2.NBT.A.4) into the work of place value.  Limit the amount of required student practice on counting by ones.  Note: While the standards in cluster 2.NBT.A are Major Work of the Grade, during the 2020-21 school year, it is recommended that they receive lighter treatment. |
| 2.OA.C.4 Use addition to find the total<br>number of objects arranged in rectangular<br>arrays with up to 5 rows and up to 5   | ■ 1.OA.D.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   |   |



**Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives** 

| Standard and Student Learning Objectives  | Previous Grade(s) Standards and Student Learning Objectives  | Instructional Considerations  SAP recommendation to preserve or reduce time in 20-21 as compared to a typical year   |
|---|--|--|
| columns; write an equation to express the total as a sum of equal addends.  | equations are true and which are false? $6 = 6$ , $7 = 8 - 1$ , $5 + 2 = 2 + 5$ , $4 + 1 = 5 + 2$  |  |
| We are learning to/that   | We have learned to/that  |  |
| <ul> <li>use repeated addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns</li> <li>write an equation to express the total number of objects arranged in a rectangular array as a sum of equal addends</li> </ul>  | <ul> <li>determine if equations involving addition<br/>and subtraction within 20 are true or false<br/>using the meaning of the equal sign</li> </ul>  |  |
| <ul> <li>2.NBT.B.5 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</li> <li>We are learning to/that</li> <li>add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction working towards accuracy and efficiency</li> </ul> | adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models (e.g., base ten blocks) 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. | Prioritize strategies based on place value in written work to strengthen the progression toward fluency with multi-digit addition and subtraction.  Incorporate foundational work on addition and subtraction within 100 from grade 1 (1.NBT.C) to support the addition and subtraction work of grade 2.  Note that grade 2 students are not expected to be fluent with three-digit sums and differences; repetitive fluency exercises are not required. |
|   | We have learned to/that  |  |



**Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives** 

| Standard and Student Learning Objectives | Previous Grade(s) Standards and Student<br>Learning Objectives   | Instructional Considerations  SAP recommendation to preserve or reduce time |
|--|--|---|
|  | <b>.</b>   | in 20-21 as compared to a typical year                                      |
|  | <ul> <li>compose tens when adding two-digit numbers, if necessary</li> <li>when adding two-digit numbers, one adds tens and tens, ones and ones</li> <li>add a two-digit number and a one-digit number within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction</li> <li>add a two-digit number and a multiple of 10, within 100, using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction</li> </ul> |   |
|  | ■ 1.NBT.C.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.  We have learned to/that  |   |
|  | <ul> <li>subtract multiples of 10 from multiples of<br/>10 using strategies based on place value</li> </ul>  |   |



| Standard and Student Learning Objectives | Previous Grade(s) Standards and Student Learning Objectives   | Instructional Considerations <u>SAP</u> recommendation to preserve or reduce time |
|--|---|---|
|  |   | in 20-21 as compared to a typical year  |
|  | or properties of operations (multiples of 10 less than or equal to 90)  explain the reasoning used when subtracting multiples of 10 from multiples of 10 (multiples of 10 less than or equal to 90) |   |



Unit 3, Module B

| Standard and Student Learning Objectives  | Previous Grade(s) Standards and Student Learning Objectives  | Instructional Considerations <u>SAP</u> recommendation to preserve or reduce time in 20-21 as compared to a typical year   |
|---|--|--|
| <ul> <li>2.MD.A.1 Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.</li> <li>We are learning to/that</li> <li>measure lengths of objects after selecting appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes</li> </ul> | <ul> <li>1.MD.A.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.</li> <li>We have learned to/that</li> <li>the length of an object is the number of same-size length units that span it with no gaps or overlaps</li> <li>express the length of an object as a whole number of length units, by laying multiple copies of a shorter object end to end</li> </ul> | Integrate lessons and practice on comparing and estimating lengths (2.MD.A.2, 2.MD.A.3, 2.MD.A.4) into the work of measuring length with tools (2.MD.A.1) in order to reduce the amount of time spent on this cluster. Limit the amount of required student practice.  Note: While the standards in cluster 2.MD.A are Major Work of the Grade, during the 2020-21 school year, it is recommended that they receive lighter treatment. |
| <ul> <li>2.MD.A.3 Estimate lengths using units of inches, feet, centimeters, and meters.</li> <li>We are learning to/that</li> <li>estimate lengths of objects using the units of inches, feet, centimeters, or meters</li> </ul>   | n/a  | Integrate lessons and practice on comparing and estimating lengths (2.MD.A.2, 2.MD.A.3, 2.MD.A.4) into the work of measuring length with tools (2.MD.A.1) in order to reduce the amount of time spent on this cluster. Limit the amount of required student practice.  |



**Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives** 

| Standard and Student Learning Objectives  | Previous Grade(s) Standards and Student Learning Objectives | Instructional Considerations  SAP recommendation to preserve or reduce time in 20-21 as compared to a typical year  Note: While the standards in cluster 2.MD.A are Major Work of the Grade, during the 2020-21 school year, it is recommended that they receive lighter treatment.  |
|---|---|--|
| <ul> <li>2.MD.A.4 Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit</li> <li>We are learning to/that</li> <li>measure to determine how much longer one object is than the other and express the difference in length using a standard unit of length</li> </ul>  | n/a   | Integrate lessons and practice on comparing and estimating lengths (2.MD.A.2, 2.MD.A.3, 2.MD.A.4) into the work of measuring length with tools (2.MD.A.1) in order to reduce the amount of time spent on this cluster. Limit the amount of required student practice.  Note: While the standards in cluster 2.MD.A are Major Work of the Grade, during the 2020-21 school year, it is recommended that they receive lighter treatment. |
| <ul> <li>2.MD.A.2 Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.</li> <li>We are learning to/that</li> <li>measure the length of an object twice using different units of measure</li> <li>describe how two different measurements of an object relate to the size of the measurement unit chosen</li> </ul> | n/a   | Integrate lessons and practice on comparing and estimating lengths (2.MD.A.2, 2.MD.A.3, 2.MD.A.4) into the work of measuring length with tools (2.MD.A.1) in order to reduce the amount of time spent on this cluster. Limit the amount of required student practice.  Note: While the standards in cluster 2.MD.A are Major Work of the Grade, during the 2020-21 school year, it is recommended that they receive lighter treatment. |



Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives

| Standard and Student Learning Objectives  | Previous Grade(s) Standards and Student  | Instructional Considerations   |
|---|--|--|
|   | Learning Objectives  | <u>SAP</u> recommendation to preserve or reduce time                                       |
|   |  | in 20-21 as compared to a typical year   |
| <ul> <li>2.MD.B.5 Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.</li> <li>We are learning to/that</li> <li>add and subtract within 100 to solve word problems that involve lengths of the same units</li> <li>use equations with a symbol for the unknown and drawings, such as drawings of rulers, to represent the problem</li> </ul> | adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models (e.g., base ten blocks) 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.                       | Ensure word problems represent all grade 2 problem types and refer to guidance for 2.OA.A. |
|   | <ul> <li>we have learned to/that</li> <li>compose tens when adding two-digit numbers, if necessary</li> <li>when adding two-digit numbers, one adds tens and tens, ones and ones</li> <li>add a two-digit number and a one-digit number within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction</li> <li>add a two-digit number and a multiple of 10, within 100, using strategies based on place value, properties of operations,</li> </ul> |  |



**Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives** 

| Standard and Student Learning Objectives   | Previous Grade(s) Standards and Student<br>Learning Objectives   | Instructional Considerations  SAP recommendation to preserve or reduce time in 20-21 as compared to a typical year  |
|--|--|---|
|  | and/or the relationship between addition and subtraction   |   |
|  | 1.NBT.C.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. |   |
|  | <ul> <li>subtract multiples of 10 from multiples of 10 using strategies based on place value or properties of operations (multiples of 10 less than or equal to 90)</li> <li>explain the reasoning used when subtracting multiples of 10 from multiples of 10 (multiples of 10 less than or equal to 90)</li> </ul>  |   |
| <b>2.MD.B.6</b> Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0,1,2, and represent wholenumber sums and differences within 100 on a number line diagram | n/a  | For curricula and lessons that are well aligned to representing lengths on number line diagrams as detailed in this standard, no special considerations for shifting how time is dedicated are recommended. |



# **Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives**

| Standard and Student Learning Objectives  | Previous Grade(s) Standards and Student<br>Learning Objectives | Instructional Considerations <u>SAP</u> recommendation to preserve or reduce time in 20-21 as compared to a typical year |
|---|--|--|
| <ul> <li>We are learning to/that</li> <li>use equally spaced points of a number line to represent whole numbers as lengths from 0</li> <li>represent whole number sums within 100 on a number line diagram</li> <li>represent whole number differences within 100 on a number line diagram</li> </ul> |  | Time spent on instruction and practice should <b>not</b> be reduced.   |



February 2021



Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives

## **Description**

Included here are the prerequisite concepts and skills necessary for students to learn grade level content based on the New Jersey Student Learning Standards in mathematics. This tool is intended to support educators in the identification of any gaps in conceptual understanding or skill that might exist in a student's understanding of mathematics standards. The organization of this document mirrors that of the mathematics instructional units, includes all grade level standards, and reflects a grouping of standards and student learning objectives.

The tables are divided into three columns. The first column contains the grade level standard and student learning objectives, which reflect the corresponding concepts and skills in that standard. The second column contains standards from prior grades and the corresponding learning objectives, which reflect prerequisite concepts and skills essential for student attainment of the grade level standard as listed on the left. Given that a single standard may reflect multiple concepts and skills, all learning objectives for a prior grade standard may not be listed. Only those prior grade learning objectives that reflect prerequisite concepts and skills important for attainment of the associated grade level standard is listed. The third column contains the recommendations from <a href="Student Achievement Partners">Student Achievement Partners</a> recommendations (SAP) for the 2020-21 school year regarding preserving or reducing time as compared to a typical academic year.

Content Emphases Key: : Major Cluster : Supporting Cluster : Additional Cluster

## **Unit 4: Measurement Data and Data Representations**

#### **Rationale for Unit Focus**

Building on their grade 1 experiences partitioning circles and rectangles into two and four equal shares, grade 2 learners also partition those figures into three equal shares and recognize that equal shares of identical wholes need not have the same shape. They solidify their skills solve word problems involving money and telling time to the nearest five minutes, and revisit repeated addition in preparation for multiplication in grade 3.



### Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives

In the final unit of grade 2, learners generate measurement data and represent the data in line plots. They measure lengths of several objects to the nearest whole unit or make repeated measurements of the same object to generate data. Grade 2 learners also represent data with picture and a bar graphs, representing a data set with up to four categories. This unit concludes as learners state from memory all sums of two one-digit numbers, demonstrate fluency for addition and subtraction within 100 using strategies, and demonstrate fluency for addition and subtraction within 20 using mental strategies.

Unit 4, Module A

| Standard and Student Learning Objectives  | Previous Grade(s) Standards and Student Learning Objectives  | Instructional Considerations  SAP recommendation to preserve or reduce time in 20-21 as compared to a typical year   |
|---|--|--|
| <ul> <li>2.MD.D.9 Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in wholenumber units.</li> <li>We are learning to/that</li> <li>generate measurement data by measuring lengths, to the nearest whole unit, of several objects</li> <li>generate measurement data by measuring the same object multiple times</li> <li>record measurements in a line plot whose horizontal scale is in whole number units</li> </ul> | <ul> <li>1.MD.A.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object.</li> <li>We have learned to/that</li> <li>length is measured from one endpoint to another</li> </ul> | Eliminate lessons on generating measurement data (2.MD.D.9) and creating picture/bar graphs (2.MD.D.10).  Integrate data displays only as settings for addition/subtraction word problems. |
| <b>2.MD.D.10</b> Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put together, take-   | ■ 1.MD.C.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   | Eliminate lessons on generating measurement data (2.MD.D.9) and creating picture/bar graphs (2.MD.D.10).  Integrate data displays only as settings for addition/subtraction word problems. |

**Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives** 

| Standard and Student Learning Objectives   | Previous Grade(s) Standards and Student Learning Objectives   | Instructional Considerations <u>SAP</u> recommendation to preserve or reduce time in 20-21 as compared to a typical year |
|--|---|--|
| apart, and compare problems using information presented in a bar graph. We are learning to/that  | category, and how many more or less are in one category than in another. We have learned to/that  |  |
| <ul> <li>draw a picture graph to represent a data set with up to four categories</li> <li>draw a bar graph to represent a data set with up to four categories</li> <li>use information from a bar graph to solve simple put together, take-apart, and compare problems</li> </ul>  | <ul> <li>organize and represent data with up to three categories</li> <li>interpret data with up to three categories by stating observations about the data</li> <li>ask and answer questions about the total number of data points, the number in each category, and how many more or less are in one category than in another</li> </ul>  |  |
| <ul> <li>2.MD.B.5 Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem. We are learning to/that</li> <li>add and subtract within 100 to solve word problems that involve lengths of the same units</li> <li>use equations with a symbol for the unknown and drawings, such as drawings of rulers, to represent the problem</li> </ul> | adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models (e.g., base ten blocks) 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.  We have learned to/that | Ensure word problems represent all grade 2 problem types and refer to guidance for 2.OA.A.                               |



**Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives** 

| Standard and Student Learning Objectives | Previous Grade(s) Standards and Student<br>Learning Objectives   | Instructional Considerations  SAP recommendation to preserve or reduce time in 20-21 as compared to a typical year |
|--|--|--|
|  | <ul> <li>compose tens when adding two-digit numbers, if necessary</li> <li>when adding two-digit numbers, one adds tens and tens, ones and ones</li> <li>add a two-digit number and a one-digit number within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction</li> <li>add a two-digit number and a multiple of 10, within 100, using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction</li> </ul> |  |
|  | ■ 1.NBT.C.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.  We have learned to/that  |  |
|  | <ul> <li>subtract multiples of 10 from multiples of<br/>10 using strategies based on place value</li> </ul>  |  |



**Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives** 

| Standard and Student Learning Objectives  | Previous Grade(s) Standards and Student Learning Objectives  | Instructional Considerations  SAP recommendation to preserve or reduce time in 20-21 as compared to a typical year   |
|---|--|--|
|   | or properties of operations (multiples of 10 less than or equal to 90)  explain the reasoning used when subtracting multiples of 10 from multiples of 10 (multiples of 10 less than or equal to 90)  |  |
| <ul> <li>2.NBT.B.5 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</li> <li>We are learning to/that</li> <li>add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction, with accuracy and efficiency</li> </ul> | adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models (e.g., base ten blocks) 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. | Prioritize strategies based on place value in written work to strengthen the progression toward fluency with multi-digit addition and subtraction.  Incorporate foundational work on addition and subtraction within 100 from grade 1 (1.NBT.C) to support the addition and subtraction work of grade 2.  Note that grade 2 students are not expected to be fluent with three-digit sums and differences; repetitive fluency exercises are not required. |
|   | <ul> <li>We have learned to/that</li> <li>compose tens when adding two-digit numbers, if necessary</li> <li>when adding two-digit numbers, one adds tens and tens, ones and ones</li> </ul>  |  |



**Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives** 

| Standard and Student Learning Objectives | Previous Grade(s) Standards and Student<br>Learning Objectives   | Instructional Considerations <u>SAP</u> recommendation to preserve or reduce time in 20-21 as compared to a typical year |
|--|--|--|
|  | <ul> <li>add a two-digit number and a one-digit number within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction</li> <li>add a two-digit number and a multiple of 10, within 100, using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction</li> </ul> |  |
|  | 1.NBT.C.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.                                   |  |
|  | We have learned to/that  |  |
|  | <ul> <li>subtract multiples of 10 from multiples of 10 using strategies based on place value or properties of operations (multiples of 10 less than or equal to 90)</li> <li>explain the reasoning used when subtracting multiples of 10 from</li> </ul>   |  |



**Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives** 

| Standard and Student Learning Objectives   | Previous Grade(s) Standards and Student<br>Learning Objectives  | Instructional Considerations  SAP recommendation to preserve or reduce time in 20-21 as compared to a typical year   |
|--|---|--|
|  | multiples of 10 (multiples of 10 less than or equal to 90)  |  |
| <ul> <li>2.OA.B.2 Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.</li> <li>We are learning to/that</li> <li>add and subtract within 20 with accuracy and efficiency</li> <li>know from memory all sums of two one-digit numbers</li> </ul> | <ul> <li>1.OA.C.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). We have learned to/that</li> <li>add and subtract within 20 using strategies such as counting on, making ten, and decomposing a number leading to a ten</li> <li>add and subtract within 20 using strategies such as relationship between addition and subtraction, and using easier or known sums within 10</li> <li>add and subtract within 10 with accuracy and efficiency</li> </ul> | Incorporate additional practice on the grade 1 fluency of adding and subtracting within 10 (1.OA.C.6) early in the school year to support the addition and subtraction work of grade 2 (2.OA). |



# Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives

Unit 4, Module B

| Standard and Student Learning Objectives   | Previous Grade(s) Standards and Student  | Instructional Considerations  |
|--|--|---|
|  | Learning Objectives  | <u>SAP</u> recommendation to preserve or reduce time in 20-21 as compared to a typical year   |
| <ul> <li>2.NBT.A.2 Count within 1000; skip-count by 5s, 10s, and 100s.</li> <li>We are learning to/that</li> <li>count within 1000</li> <li>skip count by fives</li> <li>skip count by tens</li> <li>skip count by hundreds</li> </ul>   | <ul> <li>1.NBT.A.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. We have learned to/that</li> <li>count to 120</li> <li>represent objects with a written number in sets within 120 objects</li> </ul> | Emphasize the conceptual understanding of three-digit numbers (as detailed in 1.NBT.A.1).  Integrate lessons and practice on counting, reading/writing, and comparing numbers (2.NBT.A.2, 2.NBT.A.3, 2.NBT.A.4) into the work of place value.  Limit the amount of required student practice on counting by ones.  Note: While the standards in cluster 2.NBT.A are Major Work of the Grade, during the 2020-21 school year, it is recommended that they receive lighter treatment. |
| <ul> <li>2.OA.C.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.</li> <li>We are learning to/that</li> <li>use repeated addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns</li> </ul> | <b>1.0A.D.7</b> 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? $6 = 6$ , $7 = 8 - 1$ , $5 + 2 = 2 + 5$ , $4 + 1 = 5 + 2$ We have learned to/that      | Limit lessons on foundations for multiplication.  |



**Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives** 

| Standard and Student Learning Objectives   | Previous Grade(s) Standards and Student<br>Learning Objectives   | Instructional Considerations  SAP recommendation to preserve or reduce time in 20-21 as compared to a typical year  |
|--|--|---|
| <ul> <li>write an equation to express the total<br/>number of objects arranged in a<br/>rectangular array as a sum of equal<br/>addends</li> </ul>   | <ul> <li>determine if equations involving addition<br/>and subtraction within 20 are true or false<br/>using the meaning of the equal sign</li> </ul>  |   |
| <ul> <li>2.G.A.1 Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.</li> <li>We are learning to/that</li> <li>recognize and draw shapes based on their attributes, such as a given number of angles or a given number of equal faces</li> <li>identify cubes, triangles, quadrilaterals, pentagons, and hexagons</li> </ul> | <ul> <li>1.G.A.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.</li> <li>We have learned to/that</li> <li>distinguish between defining and non-defining attributes</li> <li>build and draw shapes that have particular defining attributes</li> </ul> | Combine lessons to address key concepts on reasoning with shapes and their attributes to reduce the amount of time spent on this cluster.  Limit the amount of required student practice. |
| 2.G.A.3 Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.  We are learning to/that  | 1.G.A.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.  We have learned to/that  | Combine lessons to address key concepts on reasoning with shapes and their attributes to reduce the amount of time spent on this cluster.  Limit the amount of required student practice. |



**Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives** 

| Standard and Student Learning Objectives   | Previous Grade(s) Standards and Student<br>Learning Objectives  | Instructional Considerations  SAP recommendation to preserve or reduce time in 20-21 as compared to a typical year   |
|--|---|--|
| <ul> <li>partition circles and rectangles into two, three, or four equal shares</li> <li>describe the shares using the words halves, thirds, fourths, half of, a third of, or fourth of</li> <li>describe the whole as two halves, three thirds, four fourths</li> <li>recognize that equal shares of identical wholes need not have the same shape</li> </ul> | <ul> <li>partition means to split a shape into smaller parts, also called shares</li> <li>partition circles and rectangles into two equal shares and describe each share using the word "halves" or the phrase "half of"</li> <li>partition circles and rectangles into four equal shares and describe each share using the word "fourths" or the phrase "fourth of"</li> <li>decomposing shapes into more equal shares creates smaller shares</li> </ul> |  |
| <ul> <li>2.MD.C.7 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.</li> <li>We are learning to/that</li> <li>use analog and digital clocks to tell time to the nearest five minutes using a.m. and p.m.</li> </ul>  | <ul> <li>1.MD.B.3 Tell and write time in hours and half-hours using analog and digital clocks.</li> <li>We have learned to/that</li> <li>tell and write time to the hour using analog and digital clocks</li> <li>tell and write time to the half-hour using analog and digital clocks</li> </ul>   | Combine lessons in order to reduce the amount of time spent on time and money.  Emphasize denominations that support place value understanding such as penny-dimedollar.  Limit the amount of required student practice. |
| <b>2.MD.C.8.</b> Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. <i>Example:</i> If you have 2 dimes and 3 pennies, how many cents do you have?  We are learning to/that  | ■ 1.NBT.C.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 (e.g., base ten blocks) or drawings and strategies based on place value, properties of operations, and/or the relationship  | Combine lessons in order to reduce the amount of time spent on time and money.  Emphasize denominations that support place value understanding such as penny-dimedollar.  Limit the amount of required student practice. |



**Grade 2: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives** 

| Standard and Student Learning Objectives   | Previous Grade(s) Standards and Student<br>Learning Objectives  | Instructional Considerations  SAP recommendation to preserve or reduce time in 20-21 as compared to a typical year |
|--|---|--|
| <ul> <li>solve word problems involving dollar bills, quarters, dimes, nickels, and pennies using the \$ and ¢ symbols appropriately</li> </ul> | 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.  We have learned to/that  add a two-digit number and a one-digit number within 100 using concrete models (e.g., base ten) or drawings  add a two-digit number and a one-digit number within 100 using strategies based on place value or properties of operations  add a two-digit number and a multiple of 10, within 100, using concrete models (e.g., base ten blocks) or drawings  add a two-digit number and a multiple of 10, within 100, using strategies based on place value or properties of operations |  |

