February 2021

STATE OF NEW JERSEY
DEPARTMENT OF EDUCATION

Grade 3: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives by Domain

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 New Jersey Student Learning Standards for mathematics, includes all grade- or course-level standards and the associated student learning objectives, and reflects a grouping of the standards by domain.

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 Student Achievement Partners' 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

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.

Grade 3: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives

Domain: Operations and Algebraic Thinking

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
3.OA.A.1 Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. For example, describe and/or represent a context in which a total number of objects can be expressed as 5 × 7. We are learning to/that… ▪ interpret products of whole numbers in terms of the number of groups and objects**	**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 have learned to/that… ▪ use repeated 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 number of objects arranged in a rectangular array as a sum of equal addends	No special considerations for curricula well aligned to multiplication and division concepts and problem solving, as detailed in this standard or cluster. Students may need extra support to see row and column structure in arrays of objects. Time spent on instruction and practice should **not** be reduced
3.OA.A.2 Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe and/or represent a context in which a number of shares or a number of groups can be expressed as 56 ÷ 8.	n/a	No special considerations for curricula well aligned to multiplication and division concepts and problem solving, as detailed in this standard or cluster. Students may need extra support to see row and column structure in arrays of objects. Time spent on instruction and practice should **not** be reduced

Grade 3: 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
We are learning to/that… ▪ interpret whole number quotients of whole numbers as the number of objects in each share (or groups) or as the number of shares (or groups) that result from partitioning a total number of objects**		
3.OA.A.3 Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. 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	**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 have learned to/that… ▪ use repeated 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 number of objects arranged in a rectangular array as a sum of equal addends	No special considerations for curricula well aligned to multiplication and division concepts and problem solving, as detailed in this standard or cluster. Students may need extra support to see row and column structure in arrays of objects. Time spent on instruction and practice should **not** be reduced

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
3.OA.A.4 Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations 8 × ? = 48, 5 = ◻ ÷ 3, 6 × 6 = ?. We are learning to/that… ▪ determine the unknown whole number in a multiplication or division equation relating three whole numbers **	n/a	No special considerations for curricula well aligned to multiplication and division concepts and problem solving, as detailed in this standard or cluster. Students may need extra support to see row and column structure in arrays of objects. Time spent on instruction and practice should **not** be reduced
3.OA.B.5 Apply properties of operations as strategies to multiply and divide. *Examples:* If 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative property of multiplication.) 3 × 5 × 2 can be found by 3 × 5 = 15, then 15 × 2 = 30, or by 5 × 2 = 10, then 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property). We are learning to/that… ▪ apply properties of operations (commutative property) as strategies to multiply ▪ apply the distributive property as a strategy to multiply	n/a	*Incorporate* additional practice with double digit sums (2.NBT.B.5) to support the grade 3 multiplication work with properties of operations, especially the distributive property.

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
▪ apply properties of operations (associative property) as strategies to multiply		
3.OA.B.6 Understand division as an unknown-factor problem. For example, find 32 ÷ 8 by finding the number that makes 32 when multiplied by 8. We are learning to/that… ▪ a related multiplication problem with an unknown factor can be used to solve a division problem	n/a	*Incorporate* additional practice with double digit sums (2.NBT.B.5) to support the grade 3 multiplication work with properties of operations, especially the distributive property.
3.OA.C.7 Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers. We are learning to/that… ▪ multiply and divide within 100 using strategies such as: relationship between multiplication and division or properties of operations with accuracy and efficiency ▪ know from memory all products of two one-digit numbers	n/a	*Incorporate* additional practice with double digit sums (2.NBT.B.5) to support the grade 3 multiplication work with properties of operations, especially the distributive property.

Grade 3: 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
3.OA.D.8 Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. We are learning to/that… ▪ solve simple two-step word problems using the four operations ▪ represent two-step word problems using equations with a letter standing for the unknown quantity ▪ assess the reasonableness of answers in two-step word problems using mental computation and estimation strategies including rounding	**2.OA.A.1** 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 have learned to/that… ▪ represent a word problem using drawings and equations using a symbol for the unknown ▪ 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	No special considerations for curricula well aligned to two step word problems using the four operations, as detailed in this standard/cluster. Time spent on instruction and practice should **not** be reduced.
3.OA.D.9 Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends. We are learning to/that… ▪ identify arithmetic patterns, including patterns in the addition table or	**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. We have learned to/that… ▪ determine whether a group of objects up to 20 is odd or even (e.g., by pairing objects, counting them by 2s)	*Eliminate* lessons or problems on arithmetic patterns **Note:** While this standard is part of the Major Work of the Grade, during the 2020-21 school year, it is recommended that it receive lighter treatment.

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
multiplication table, and explain them using properties of operations	▪ write an equation to express an even number as a sum of two equal addends	

Grade 3: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives

Domain: Number and Operations in Base Ten

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
3.NBT.A.1 Use place value understanding to round whole numbers to the nearest 10 or 100. We are learning to/that… ▪ round whole numbers to the nearest 10 or 100, using place value understanding	**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). problem. We have learned to/that… ▪ a three-digit number is made up of hundreds, tens, and ones ▪ the three digits of a three-digit number represent amounts of hundreds, amounts of tens, and amounts of ones ▪ 100 is a bundle of ten tens called a "hundred" ▪ The numbers 100, 200, 300, 400, 500, 600, 700, 800, and 900 refer to 1, 2, 3, 4, 5, 6, 7, 8, or 9 hundreds (and 0 tens and 0 ones)	*Combine* lessons on rounding in order to *reduce* the amount of time spent on rounding numbers. *Limit* the amount of required student practice.

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
3.NBT.A.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction. We are learning to/that… ▪ add within 1000 with accuracy and efficiency using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction ▪ subtract within 1000 with accuracy and efficiency using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction	**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 have learned 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 ▪ 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 ▪ 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	For curricula well aligned to addition and subtraction within 1000, as detailed in this standard (3.NBT.A.2), *no special considerations* for shifting how time is dedicated are recommended. Time spent on instruction and practice should **not** exceed what would be spent in a typical year (3.NBT.A.2).

Grade 3: 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
3.NBT.A.3 Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9 × 80, 5 × 60) using strategies based on place value and properties of operations. We are learning to/that… ▪ multiply one-digit whole numbers by multiples of 10 in the range 10 to 90 using strategies based on place value and properties of operations	**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 have learned to/that… ▪ a three-digit number is made up of hundreds, tens, and ones ▪ the three digits of a three-digit number represent amounts of hundreds, amounts of tens, and amounts of ones ▪ 100 is a bundle of ten tens called a “hundred” ▪ The numbers 100, 200, 300, 400, 500, 600, 700, 800, and 900 refer to 1, 2, 3, 4, 5, 6, 7, 8, or 9 hundreds (and 0 tens and 0 ones)	*Combine* lessons in order to *reduce* the amount of time spent multiplying by multiples of 10. *Emphasize* the connection to single digit products and tens units (3.NBT.A.3).

Grade 3: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives

Domain: Number and Operations - Fractions

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
3.NF.A.1 Understand a fraction 1/*b* as the quantity formed by 1 part when a whole is partitioned into *b* equal parts; understand a fraction *a*/*b* as the quantity formed by a parts of size 1/*b*. We are learning to/that… ▪ a fraction is a quantity formed when a whole is partitioned into equal parts where a unit fraction (*1/b*) is the quantity formed by 1 part when a whole is partitioned into *b* equal parts. (For example, ¼ is the quantity that is formed by 1 part of the 4 total parts when the whole is partitioned into 4 equal parts) ▪ a fraction *a/b* as the quantity formed by *a* parts, where each part has a size of *1/b*. (For example, ¾ is the quantity that is formed by 3 parts of the 4 total parts where each part has a size of ¼.)	n/a	*Emphasize* the concept of unit fraction as the basis of building fractions. *Prioritize* the number line as a representation to develop students' understanding of fractions as numbers by foregrounding the magnitude, location, and order of fractions among whole numbers (3.NF.A.2).
3.NF.A.2 Understand a fraction as a number on the number line; represent fractions on a number line diagram. a. Represent a fraction 1/*b* on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size 1/*b*	**2.MD.B.6** 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 whole-number sums and differences within 100 on a number line diagram.	*Emphasize* the concept of unit fraction as the basis of building fractions. *Prioritize* the number line as a representation to develop students' understanding of fractions as numbers by foregrounding the magnitude, location, and order of fractions among whole numbers (3.NF.A.2).

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 that the endpoint of the part based at 0 locates the number 1/*b* on the number line. b. Represent a fraction *a*/*b* on a number line diagram by marking off a lengths 1/*b* from 0. Recognize that the resulting interval has size *a*/*b* and that its endpoint locates the number *a*/*b* on the number line. We are learning to/that… ▪ fractions are numbers and can be found or represented on the number line ▪ represent a fraction *1/b* on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into *b* equal parts and recognize that the endpoint of the part based at 0 locates the number *1/b* on the number line ▪ represent a fraction *a/b* on a number line diagram by marking off a lengths *1/b* from 0 and recognize that the endpoint locates the number *a/b* on the number line	We have learned to/that… • use equally spaced points of a number line to represent whole numbers as lengths from 0 • represent whole number sums within 100 on a number line diagram • represent whole number differences within 100 on a number line diagram	
3.NF.A.3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. a. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.	n/a	*Emphasize* the concept of unit fraction as the basis of building fractions. *Prioritize* the number line as a representation to develop students' understanding of fractions as numbers by foregrounding the

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. Recognize and generate simple equivalent fractions, e.g., 1/2 = 2/4, 4/6 = 2/3). Explain why the fractions are equivalent, e.g., by using a visual fraction model. We are learning to/that… ▪ compare fractions by reasoning about their size ▪ two fractions are equivalent (equal) if they are the same size, or the same point on a number line ▪ recognize and generate simple equivalent fractions ▪ explain why two fractions are equivalent by using a visual fraction model		magnitude, location, and order of fractions among whole numbers (3.NF.A.2).
3.NF.A.3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. *Examples:* Express 3 in the form 3 = 3/1; recognize that 6/1 = 6; locate 4/4 and 1 at the same point of a number line diagram. d. Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the	n/a	*Emphasize* the concept of unit fraction as the basis of building fractions. *Prioritize* the number line as a representation to develop students' understanding of fractions as numbers by foregrounding the magnitude, location, and order of fractions among whole numbers (3.NF.A.2).

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
results of comparisons with the symbols >, =, or <. We are learning to/that… ▪ express whole numbers as fractions ▪ recognize fractions that are equivalent to whole numbers ▪ compare two fractions with the same numerator or the same denominator by reasoning about their size		

Grade 3: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives

Domain: Measurement and Data

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
3.MD.A.1 Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram. We are learning to/that… ▪ tell and write time to the nearest minute and measure time intervals in minutes ▪ solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram	n/a	*Combine* lessons in order to reduce the amount of time spent on time, volume, and mass. *Reduce* the amount of required student practice. **Note:** While this cluster is the Major Work of the grade, during the 2020-21 school year, it is recommended that they receive lighter treatment in favor of other major content.
3.MD.A.2 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (*l*). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem. We are learning to/that… ▪ measure liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (*l*)	**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 to represent the problem. We have learned to/that… • add and subtract within 100 to solve word problems that involve lengths of the same units • use equations with a symbol for the unknown and drawings, such as	*Combine* lessons in order to reduce the amount of time spent on time, volume, and mass. *Reduce* the amount of required student practice. **Note:** While this cluster is the Major Work of the grade, during the 2020-21 school year, it is recommended that it receives lighter treatment in favor of other major content.

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
▪ estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (*l*) ▪ add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units**	drawings of rulers, to represent the problem	
☐ **3.MD.B.3** Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets. We are learning to/that… ▪ draw a scaled picture graph to represent a data set with several categories ▪ draw a scaled bar graph to represent a data set with several categories ▪ solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs	☐ **2.MD.D.10** 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-apart, and compare problems using information presented in a bar graph. We have learned to/that… ▪ draw a picture graph to represent a data set with up to four categories ▪ draw a bar graph to represent a data set with up to four categories ▪ use information from a bar graph to solve simple put together, take-apart, and compare problems	*Eliminate* lessons on creating scaled graphs. *Integrate* problems with scaled graphs only as settings for multiplication word problems (3.OA.A.3) and two-step word problems (3.OA.D.8).

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
3.MD.B.4 Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters. We are learning to/that… ▪ generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch ▪ make a line plot showing measurement data, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters	**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. We have learned to/that… ▪ measure lengths of objects after selecting appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes	*Limit* any lessons that do not strongly reinforce the fraction work of this grade (3.NF.A). *Incorporate* foundational work measuring rulers (2.MD.A) to support entry into generating fractional measurement data in grade 3.
3.MD.C.5 Recognize area as an attribute of plane figures and understand concepts of area measurement. a. A square with side length 1 unit, called "a unit square," is said to have "one square unit" of area, and can be used to measure area. b. A plane figure which can be covered without gaps or overlaps by *n* unit squares is said to have an area of *n* square units. We are learning to/that… ▪ a square with side length 1 unit, called "a unit square," is said to have 'one square unit of area	**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. We have learned to/that… ▪ measure lengths of objects after selecting appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. **1.G.A.2** Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and	*Emphasize* enduring concepts of geometric measurement (iterating a unit with no gaps or overlaps) (3.MD.C.5) and students using area models to support their mathematical explanations involving the distributive property for products (3.MD.C.7c). *Combine* lessons in order to *reduce* the amount of time spent on measuring area. *Limit* the amount of required student practice.

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
▪ a unit square can be used to measure area ▪ area is an attribute of a plane figure ▪ the number of n square units covering a plane figure without gaps or overlaps, determines its area	right circular cylinders) to create a composite shape and compose new shapes from the composite shape. We have learned to/that… ▪ compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) to create a composite shape	
3.MD.C.6 Measure areas by counting unit squares (square cm, square m, square in, square ft, and nonstandard units).. We are learning to/that… ▪ measure area by counting unit squares including square cm, square m, square in, square ft, and nonstandard units	**2.G.A.2** Partition a rectangle into rows and columns of same-size squares and count to find the total number of them. We have learned to/that… ▪ partition a rectangle into rows and columns of same-size squares and count to find the total number of same size squares	*Emphasize* enduring concepts of geometric measurement (iterating a unit with no gaps or overlaps) (3.MD.C.5) and students using area models to support their mathematical explanations involving the distributive property for products (3.MD.C.7c). *Combine* lessons in order to *reduce* the amount of time spent on measuring area. *Limit* the amount of required student practice.
3.MD.C.7 Relate area to the operations of multiplication and addition. a. Find the area of a rectangle with whole-number side lengths by tiling it and show that the area is the same as would be found by multiplying the side lengths. b. Multiply side lengths to find areas of rectangles with whole number side lengths in the context of solving real world and	n/a	*Emphasize* enduring concepts of geometric measurement (iterating a unit with no gaps or overlaps) (3.MD.C.5) and students using area models to support their mathematical explanations involving the distributive property for products (3.MD.C.7c). *Combine* lessons in order to *reduce* the amount of time spent on measuring area.

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
mathematical problems and represent whole-number products as rectangular areas in mathematical reasoning. We are learning to/that… ▪ find the area of a rectangle with whole-number side lengths by tiling it ▪ show that a tiled area is the same as can be found by multiplying the side lengths ▪ multiply side lengths of rectangles to find areas in the context of real world and mathematical problems ▪ represent whole-number products and rectangular areas		*Limit* the amount of required student practice.
3.MD.C.7 Relate area to the operations of multiplication and addition. c. Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning. We are learning to/that… ▪ use tiling to show the area of a rectangle with whole-number side lengths, a and $b + c$ is composed of two additive areas, $a \times b$ and $a \times c$	n/a	*Emphasize* enduring concepts of geometric measurement (iterating a unit with no gaps or overlaps) (3.MD.C.5) and students using area models to support their mathematical explanations involving the distributive property for products (3.MD.C.7c). *Combine* lessons in order to *reduce* the amount of time spent on measuring area. *Limit* the amount of required student practice.

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
▪ use area models to represent and explain the distribution property by using mathematical reasoning		
3.MD.C.7 Relate area to the operations of multiplication and addition. d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems. We are learning to/that… ▪ recognize area as additive by finding areas of rectangles ▪ recognize area as additive by finding areas of rectilinear figures ** ▪ decompose rectilinear figures into non-overlapping rectangles and find their areas to solve real world problems	n/a	*Emphasize* enduring concepts of geometric measurement (iterating a unit with no gaps or overlaps) (3.MD.C.5) and students using area models to support their mathematical explanations involving the distributive property for products (3.MD.C.7c). *Combine* lessons in order to *reduce* the amount of time spent on measuring area. *Limit* the amount of required student practice (3.MD.C). Time spent on instruction and practice should **not** exceed what would be spent in a typical year (3.NBT.A.2).
3.MD.D.8 Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters. We are learning to/that… ▪ solve real world and mathematical problems involving perimeters of	**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 to represent the problem. We have learned to/that… • add and subtract within 100 to solve word problems that involve lengths of the same units	*Integrate* problems perimeter into the work on area (3.MD.C).

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
polygons, including finding the perimeter given the side lengths ▪ solve real world and mathematical problems involving perimeters of polygons, including finding unknown side lengths when given the perimeter ▪ solve real world and mathematical problems involving exhibiting rectangles with the same perimeter/different areas or with the same area/different perimeters	• use equations with a symbol for the unknown and drawings, such as drawings of rulers, to represent the problem	

Grade 3: New Jersey Student Learning Standards for Mathematics - Prerequisite Standards and Learning Objectives

Domain: Geometry

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
3.G.A.1 Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories. We are learning to/that… ▪ shapes (quadrilaterals) in different categories may share attributes, and that the shared attributes can define a larger category ** ▪ recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories	**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. We have learned to/that… • recognize and draw shapes based on their attributes, such as a given number of angles or a given number of equal faces • identify cubes, triangles, quadrilaterals, pentagons, and hexagons	*Combine* lessons on shapes and their attributes in order to reduce the amount of time spent on this standard.
3.G.A.2 Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. *For example*, partition a shape into 4 parts with equal area, and describe the area of each part as ¼ of the area of the shape.	**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.	*Eliminate* separate lessons on partitioning shapes. (3.G.A.2)

Grade 3: 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
We are learning to/that… ▪ partition shapes into parts with equal areas ▪ express the area of each part as a unit fraction of the whole	We have learned to/that… • partition circles and rectangles into two, three, or four equal shares • describe the shares using the words halves, thirds, fourths, half of, a third of, or fourth of • describe the whole as two halves, three thirds, four fourths • recognize that equal shares of identical wholes need not have the same shape	