Main Criteria: Common Core State Standards
Secondary Criteria: California Content Standards, Pennsylvania Core and Academic Standards
Subject: Mathematics
Grade: 3

Correlation Options: Show Correlated

Main Criteria Standards	California Content Standards	Pennsylvania Core and Academic Standards
Mathematics		
Grade 3		
CATEGORY / CLUSTER: **CCSS.Math.Practice.MP1** - Make sense of problems and persevere in solving them.	**MP.1.** - Make sense of problems and persevere in solving them.	**CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others. **CC.MP.3.** - Use appropriate tools strategically. **CC.MP.4.** - Look for and make use of structure. **CC.MP.5.** - Reason abstractly and quantitatively. **CC.MP.6.** - Model with mathematics. **CC.MP.7.** - Attend to precision. **CC.MP.8.** - Look for and express regularity in repeated reasoning.
CATEGORY / CLUSTER: **CCSS.Math.Practice.MP2** - Reason abstractly and quantitatively.	**MP.2.** - Reason abstractly and quantitatively.	**CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others. **CC.MP.3.** - Use appropriate tools strategically. **CC.MP.4.** - Look for and make use of structure. **CC.MP.5.** - Reason abstractly and quantitatively. **CC.MP.6.** - Model with mathematics. **CC.MP.7.** - Attend to precision. **CC.MP.8.** - Look for and express regularity in repeated reasoning.

CATEGORY / CLUSTER: **CCSS.Math.Practice.MP3** - Construct viable arguments and critique the reasoning of others.	**MP.3.** - Construct viable arguments and critique the reasoning of others.	**CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others. **CC.MP.3.** - Use appropriate tools strategically. **CC.MP.4.** - Look for and make use of structure. **CC.MP.5.** - Reason abstractly and quantitatively. **CC.MP.6.** - Model with mathematics. **CC.MP.7.** - Attend to precision. **CC.MP.8.** - Look for and express regularity in repeated reasoning.
CATEGORY / CLUSTER: **CCSS.Math.Practice.MP4** - Model with mathematics.	**MP.4.** - Model with mathematics.	**CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others. **CC.MP.3.** - Use appropriate tools strategically. **CC.MP.4.** - Look for and make use of structure. **CC.MP.5.** - Reason abstractly and quantitatively. **CC.MP.6.** - Model with mathematics. **CC.MP.7.** - Attend to precision. **CC.MP.8.** - Look for and express regularity in repeated reasoning.
CATEGORY / CLUSTER: **CCSS.Math.Practice.MP5** - Use appropriate tools strategically.	**MP.5.** - Use appropriate tools strategically.	**CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others. **CC.MP.3.** - Use appropriate tools strategically. **CC.MP.4.** - Look for and make use of structure.

		CC.MP.5. - Reason abstractly and quantitatively. **CC.MP.6.** - Model with mathematics. **CC.MP.7.** - Attend to precision. **CC.MP.8.** - Look for and express regularity in repeated reasoning.
CATEGORY / CLUSTER: **CCSS.Math.Practice.MP6** - Attend to precision.	**MP.6.** - Attend to precision.	**CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others. **CC.MP.3.** - Use appropriate tools strategically. **CC.MP.4.** - Look for and make use of structure. **CC.MP.5.** - Reason abstractly and quantitatively. **CC.MP.6.** - Model with mathematics. **CC.MP.7.** - Attend to precision. **CC.MP.8.** - Look for and express regularity in repeated reasoning.
CATEGORY / CLUSTER: **CCSS.Math.Practice.MP7** - Look for and make use of structure.	**MP.7.** - Look for and make use of structure.	**CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others. **CC.MP.3.** - Use appropriate tools strategically. **CC.MP.4.** - Look for and make use of structure. **CC.MP.5.** - Reason abstractly and quantitatively. **CC.MP.6.** - Model with mathematics. **CC.MP.7.** - Attend to precision. **CC.MP.8.** - Look for and express regularity in repeated reasoning.
CATEGORY / CLUSTER: **CCSS.Math.Practice.MP8** - Look for and express regularity in repeated reasoning.	**MP.8.** - Look for and express regularity in repeated reasoning.	**CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others.

		CC.MP.3. - Use appropriate tools strategically. **CC.MP.4.** - Look for and make use of structure. **CC.MP.5.** - Reason abstractly and quantitatively. **CC.MP.6.** - Model with mathematics. **CC.MP.7.** - Attend to precision. **CC.MP.8.** - Look for and express regularity in repeated reasoning.
STANDARD: **CCSS.Math.Content.3.OA.A.1** - Interpret products of whole numbers, e.g., interpret 5 x 7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5 x 7.	**3.MD.7.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. **3.MD.7.b.** - Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. **3.MD.7.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 × b and a × c. Use area models to represent the distributive property in mathematical reasoning. **3.MD.7.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. **3.NBT.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.	**CC.2.2.3.A.2.** - Understand properties of multiplication and the relationship between multiplication and division. **CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others. **CC.MP.3.** - Use appropriate tools strategically. **CC.MP.4.** - Look for and make use of structure.

	3.OA.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 a context in which a total number of objects can be expressed as 5 × 7.	**CC.MP.5.** - Reason abstractly and quantitatively.
	3.OA.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 a context in which a number of shares or a number of groups can be expressed as 56÷8.	**CC.MP.6.** - Model with mathematics.
	3.OA.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.	**CC.MP.7.** - Attend to precision.
	3.OA.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 = ?.	**CC.MP.8.** - Look for and express regularity in repeated reasoning.

	3.OA.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.) **3.OA.6.** - Understand division as an unknown-factor problem. For example, find 32 ÷ 8 by finding the number that makes 32 when multiplied by 8. **3.OA.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. **3.OA.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.	
STANDARD: **CCSS.Math.Content.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	**3.MD.7.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.	**CC.MP.1.** - Make sense of problems and persevere in solving them.

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 a context in which a number of shares or a number of groups can be expressed as 56 ÷ 8.	**3.MD.7.b.** - Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning.	**CC.MP.2.** - Construct viable arguments and critique the reasoning of others.
	3.MD.7.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 × b and a × c. Use area models to represent the distributive property in mathematical reasoning.	**CC.MP.3.** - Use appropriate tools strategically.
	3.MD.7.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.	**CC.MP.4.** - Look for and make use of structure.
	3.NBT.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.	**CC.MP.5.** - Reason abstractly and quantitatively.
	3.OA.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 a context in which a total number of objects can be expressed as 5 × 7.	**CC.MP.6.** - Model with mathematics.

	3.OA.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 a context in which a number of shares or a number of groups can be expressed as 56÷8.	**CC.MP.7.** - Attend to precision.
	3.OA.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.	**CC.MP.8.** - Look for and express regularity in repeated reasoning.
	3.OA.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 = ?.	
	3.OA.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.)	

	3.OA.6. - Understand division as an unknown-factor problem. For example, find 32 ÷ 8 by finding the number that makes 32 when multiplied by 8. **3.OA.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. **3.OA.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.	
STANDARD: **CCSS.Math.Content.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.	**3.MD.7.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. **3.MD.7.b.** - Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. **3.MD.7.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 × b and a × c. Use area models to represent the distributive property in mathematical reasoning.	**CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others. **CC.MP.3.** - Use appropriate tools strategically.

	3.MD.7.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.	**CC.MP.4.** - Look for and make use of structure.
	3.NBT.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.	**CC.MP.5.** - Reason abstractly and quantitatively.
	3.OA.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 a context in which a total number of objects can be expressed as 5 × 7.	**CC.MP.6.** - Model with mathematics.
	3.OA.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 a context in which a number of shares or a number of groups can be expressed as 56÷8.	**CC.MP.7.** - Attend to precision.
	3.OA.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.	**CC.MP.8.** - Look for and express regularity in repeated reasoning.

	3.OA.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 = ?. **3.OA.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.) **3.OA.6.** - Understand division as an unknown-factor problem. For example, find 32 ÷ 8 by finding the number that makes 32 when multiplied by 8. **3.OA.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. **3.OA.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.	

STANDARD: **CCSS.Math.Content.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 x ? = 48, 5 = _ ÷ 3, 6 x 6 = ?	**3.MD.7.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. **3.MD.7.b.** - Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. **3.MD.7.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 × b and a × c. Use area models to represent the distributive property in mathematical reasoning. **3.MD.7.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. **3.NBT.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. **3.OA.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 a context in which a total number of objects can be expressed as 5 × 7.	**CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others. **CC.MP.3.** - Use appropriate tools strategically. **CC.MP.4.** - Look for and make use of structure. **CC.MP.5.** - Reason abstractly and quantitatively. **CC.MP.6.** - Model with mathematics.

	3.OA.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 a context in which a number of shares or a number of groups can be expressed as 56÷8.	**CC.MP.7.** - Attend to precision.
	3.OA.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.	**CC.MP.8.** - Look for and express regularity in repeated reasoning.
	3.OA.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 = ?.	
	3.OA.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.)	

	3.OA.6. - Understand division as an unknown-factor problem. For example, find 32 ÷ 8 by finding the number that makes 32 when multiplied by 8. **3.OA.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. **3.OA.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.	
STANDARD: **CCSS.Math.Content.3.OA.B.5** - Apply properties of operations as strategies to multiply and divide. Examples: If 6 x 4 = 24 is known, then 4 x 6 = 24 is also known. (Commutative property of multiplication.) 3 x 5 x 2 can be found by 3 x 5 = 15, then 15 x 2 = 30, or by 5 x 2 = 10, then 3 x 10 = 30. (Associative property of multiplication.) Knowing that 8 x 5 = 40 and 8 x 2 = 16, one can find 8 x 7 as 8 x (5 + 2) = (8 x 5) + (8 x 2) = 40 + 16 = 56. (Distributive property.)	**3.MD.7.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. **3.MD.7.b.** - Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. **3.MD.7.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 × b and a × c. Use area models to represent the distributive property in mathematical reasoning.	**CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others. **CC.MP.3.** - Use appropriate tools strategically.

	3.MD.7.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.	**CC.MP.4.** - Look for and make use of structure.
	3.NBT.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.	**CC.MP.5.** - Reason abstractly and quantitatively.
	3.NBT.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.	**CC.MP.6.** - Model with mathematics.
	3.OA.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 a context in which a total number of objects can be expressed as 5 × 7.	**CC.MP.7.** - Attend to precision.
	3.OA.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 a context in which a number of shares or a number of groups can be expressed as 56÷8.	**CC.MP.8.** - Look for and express regularity in repeated reasoning.

3.OA.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.

3.OA.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 = ?.

3.OA.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.)

3.OA.6. - Understand division as an unknown-factor problem. For example, find 32 ÷ 8 by finding the number that makes 32 when multiplied by 8.

3.OA.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.

	3.OA.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. **3.OA.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.	
STANDARD: **CCSS.Math.Content.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.	**3.MD.7.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. **3.MD.7.b.** - Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. **3.MD.7.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 × b and a × c. Use area models to represent the distributive property in mathematical reasoning. **3.MD.7.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.	**CC.2.2.3.A.2.** - Understand properties of multiplication and the relationship between multiplication and division. **CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others. **CC.MP.3.** - Use appropriate tools strategically.

	3.NBT.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.	**CC.MP.4.** - Look for and make use of structure.
	3.OA.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 a context in which a total number of objects can be expressed as 5 × 7.	**CC.MP.5.** - Reason abstractly and quantitatively.
	3.OA.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 a context in which a number of shares or a number of groups can be expressed as 56÷8.	**CC.MP.6.** - Model with mathematics.
	3.OA.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.	**CC.MP.7.** - Attend to precision.
	3.OA.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 = ?.	**CC.MP.8.** - Look for and express regularity in repeated reasoning.

	3.OA.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.) **3.OA.6.** - Understand division as an unknown-factor problem. For example, find 32 ÷ 8 by finding the number that makes 32 when multiplied by 8. **3.OA.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. **3.OA.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.	
STANDARD: **CCSS.Math.Content.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 x	**3.MD.7.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.	**CC.2.2.3.A.1.** - Represent and solve problems involving multiplication and division.

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.	**3.MD.7.b.** - Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. **3.MD.7.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 × b and a × c. Use area models to represent the distributive property in mathematical reasoning. **3.MD.7.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. **3.NBT.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. **3.NBT.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. **3.OA.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 a context in which a total number of objects can be expressed as 5 × 7.	**CC.2.2.3.A.2.** - Understand properties of multiplication and the relationship between multiplication and division. **CC.2.2.3.A.4.** - Solve problems involving the four operations, and identify and explain patterns in arithmetic. **CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others. **CC.MP.3.** - Use appropriate tools strategically. **CC.MP.4.** - Look for and make use of structure.

	3.OA.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 a context in which a number of shares or a number of groups can be expressed as 56÷8.	**CC.MP.5.** - Reason abstractly and quantitatively.
	3.OA.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.	**CC.MP.6.** - Model with mathematics.
	3.OA.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 = ?.	**CC.MP.7.** - Attend to precision.
	3.OA.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.)	**CC.MP.8.** - Look for and express regularity in repeated reasoning.

	3.OA.6. - Understand division as an unknown-factor problem. For example, find 32 ÷ 8 by finding the number that makes 32 when multiplied by 8. **3.OA.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. **3.OA.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. **3.OA.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.	
STANDARD: **CCSS.Math.Content.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.	**3.MD.7.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. **3.MD.7.b.** - Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning.	**CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others.

	3.MD.7.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 × b and a × c. Use area models to represent the distributive property in mathematical reasoning.	**CC.MP.3.** - Use appropriate tools strategically.
	3.MD.7.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.	**CC.MP.4.** - Look for and make use of structure.
	3.NBT.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.	**CC.MP.5.** - Reason abstractly and quantitatively.
	3.NBT.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.	**CC.MP.6.** - Model with mathematics.
	3.OA.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 a context in which a total number of objects can be expressed as 5 × 7.	**CC.MP.7.** - Attend to precision.
	3.OA.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 a context in which a number of shares or a number of groups can be expressed as 56÷8.	**CC.MP.8.** - Look for and express regularity in repeated reasoning.

3.OA.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.

3.OA.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 = ?.

3.OA.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.)

3.OA.6. - Understand division as an unknown-factor problem. For example, find 32 ÷ 8 by finding the number that makes 32 when multiplied by 8.

3.OA.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.

	3.OA.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. **3.OA.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.	
STANDARD: **CCSS.Math.Content.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.	**3.MD.7.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 × b and a × c. Use area models to represent the distributive property in mathematical reasoning. **3.NBT.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. **3.NBT.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.	**CC.2.2.3.A.4.** - Solve problems involving the four operations, and identify and explain patterns in arithmetic. **CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others.

	3.OA.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.)	**CC.MP.3.** - Use appropriate tools strategically.
	3.OA.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.	**CC.MP.4.** - Look for and make use of structure.
	3.OA.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.	**CC.MP.5.** - Reason abstractly and quantitatively.
	3.OA.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.	**CC.MP.6.** - Model with mathematics.
		CC.MP.7. - Attend to precision.
		CC.MP.8. - Look for and express regularity in repeated reasoning.

STANDARD: **CCSS.Math.Content.3.NBT.A.1** - Use place value understanding to round whole numbers to the nearest 10 or 100.	**3.NBT.1.** - Use place value understanding to round whole numbers to the nearest 10 or 100. **3.NBT.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. **3.NBT.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.	**CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others. **CC.MP.3.** - Use appropriate tools strategically. **CC.MP.4.** - Look for and make use of structure. **CC.MP.5.** - Reason abstractly and quantitatively. **CC.MP.6.** - Model with mathematics. **CC.MP.7.** - Attend to precision. **CC.MP.8.** - Look for and express regularity in repeated reasoning.
STANDARD: **CCSS.Math.Content.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.	**3.MD.7.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 × b and a × c. Use area models to represent the distributive property in mathematical reasoning. **3.NBT.1.** - Use place value understanding to round whole numbers to the nearest 10 or 100. **3.NBT.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.	**CC.2.1.3.B.1.** - Apply place-value understanding and properties of operations to perform multi-digit arithmetic. **CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others.

	3.NBT.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.	**CC.MP.3.** - Use appropriate tools strategically.
	3.OA.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.)	**CC.MP.4.** - Look for and make use of structure.
	3.OA.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.	**CC.MP.5.** - Reason abstractly and quantitatively.
	3.OA.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.	**CC.MP.6.** - Model with mathematics.
	3.OA.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.	**CC.MP.7.** - Attend to precision.

		CC.MP.8. - Look for and express regularity in repeated reasoning.
STANDARD: **CCSS.Math.Content.3.NBT.A.3** - Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., 9 x 80, 5 x 60) using strategies based on place value and properties of operations.	**3.MD.7.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. **3.MD.7.b.** - Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. **3.MD.7.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 × b and a × c. Use area models to represent the distributive property in mathematical reasoning. **3.MD.7.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. **3.NBT.1.** - Use place value understanding to round whole numbers to the nearest 10 or 100. **3.NBT.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. **3.NBT.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.	**CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others. **CC.MP.3.** - Use appropriate tools strategically. **CC.MP.4.** - Look for and make use of structure. **CC.MP.5.** - Reason abstractly and quantitatively. **CC.MP.6.** - Model with mathematics. **CC.MP.7.** - Attend to precision.

	3.OA.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 a context in which a total number of objects can be expressed as 5 × 7. **3.OA.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 a context in which a number of shares or a number of groups can be expressed as 56÷8. **3.OA.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. **3.OA.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 = ?.	**CC.MP.8.** - Look for and express regularity in repeated reasoning.

	3.OA.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.) **3.OA.6.** - Understand division as an unknown-factor problem. For example, find 32 ÷ 8 by finding the number that makes 32 when multiplied by 8. **3.OA.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. **3.OA.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. **3.OA.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.	

STANDARD: **CCSS.Math.Content.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.	**3.G.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 1/4 of the area of the shape.	**CC.2.1.3.C.1.** - Explore and develop an understanding of fractions as numbers.
	3.NF.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.	**CC.MP.1.** - Make sense of problems and persevere in solving them.
	3.NF.2.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 and that the endpoint of the part based at 0 locates the number 1/b on the number line.	**CC.MP.2.** - Construct viable arguments and critique the reasoning of others.
	3.NF.2.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.	**CC.MP.3.** - Use appropriate tools strategically.
	3.NF.3.a. - Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.	**CC.MP.4.** - Look for and make use of structure.
	3.NF.3.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.	**CC.MP.5.** - Reason abstractly and quantitatively.

	3.NF.3.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. **3.NF.3.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 results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.	**CC.MP.6.** - Model with mathematics. **CC.MP.7.** - Attend to precision. **CC.MP.8.** - Look for and express regularity in repeated reasoning.
EXPECTATION: **CCSS.Math.Content.3.NF.A.2a** - 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 and that the endpoint of the part based at 0 locates the number 1/b on the number line.	**3.G.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 1/4 of the area of the shape. **3.MD.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. **3.NF.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.	**CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others. **CC.MP.3.** - Use appropriate tools strategically.

	3.NF.2.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 and that the endpoint of the part based at 0 locates the number 1/b on the number line.	**CC.MP.4.** - Look for and make use of structure.
	3.NF.2.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.	**CC.MP.5.** - Reason abstractly and quantitatively.
	3.NF.3.a. - Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.	**CC.MP.6.** - Model with mathematics.
	3.NF.3.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.	**CC.MP.7.** - Attend to precision.
	3.NF.3.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.	**CC.MP.8.** - Look for and express regularity in repeated reasoning.
	3.NF.3.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 results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.	

EXPECTATION: **CCSS.Math.Content.3.NF.A.2b** - 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.	**3.G.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 1/4 of the area of the shape.	**CC.MP.1.** - Make sense of problems and persevere in solving them.
	3.MD.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.	**CC.MP.2.** - Construct viable arguments and critique the reasoning of others.
	3.NF.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.	**CC.MP.3.** - Use appropriate tools strategically.
	3.NF.2.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 and that the endpoint of the part based at 0 locates the number 1/b on the number line.	**CC.MP.4.** - Look for and make use of structure.
	3.NF.2.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.	**CC.MP.5.** - Reason abstractly and quantitatively.
	3.NF.3.a. - Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.	**CC.MP.6.** - Model with mathematics.

	3.NF.3.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. **3.NF.3.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. **3.NF.3.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 results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.	**CC.MP.7.** - Attend to precision. **CC.MP.8.** - Look for and express regularity in repeated reasoning.
EXPECTATION: **CCSS.Math.Content.3.NF.A.3a** - Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.	**3.G.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 1/4 of the area of the shape. **3.MD.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. **3.NF.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.	**CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others. **CC.MP.3.** - Use appropriate tools strategically.

	3.NF.2.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 and that the endpoint of the part based at 0 locates the number 1/b on the number line.	**CC.MP.4.** - Look for and make use of structure.
	3.NF.2.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.	**CC.MP.5.** - Reason abstractly and quantitatively.
	3.NF.3.a. - Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.	**CC.MP.6.** - Model with mathematics.
	3.NF.3.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.	**CC.MP.7.** - Attend to precision.
	3.NF.3.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.	**CC.MP.8.** - Look for and express regularity in repeated reasoning.
	3.NF.3.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 results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.	

EXPECTATION: **CCSS.Math.Content.3.NF.A.3b** - 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.	**3.G.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 1/4 of the area of the shape. **3.NF.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. **3.NF.2.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 and that the endpoint of the part based at 0 locates the number 1/b on the number line. **3.NF.2.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. **3.NF.3.a.** - Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. **3.NF.3.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.	**CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others. **CC.MP.3.** - Use appropriate tools strategically. **CC.MP.4.** - Look for and make use of structure. **CC.MP.5.** - Reason abstractly and quantitatively. **CC.MP.6.** - Model with mathematics.

	3.NF.3.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. **3.NF.3.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 results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.	**CC.MP.7.** - Attend to precision. **CC.MP.8.** - Look for and express regularity in repeated reasoning.
EXPECTATION: **CCSS.Math.Content.3.NF.A.3c** - 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.	**3.G.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 1/4 of the area of the shape. **3.MD.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. **3.NF.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.	**CC.2.1.3.C.1.** - Explore and develop an understanding of fractions as numbers. **CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others.

	3.NF.2.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 and that the endpoint of the part based at 0 locates the number 1/b on the number line.	**CC.MP.3.** - Use appropriate tools strategically.
	3.NF.2.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.	**CC.MP.4.** - Look for and make use of structure.
	3.NF.3.a. - Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.	**CC.MP.5.** - Reason abstractly and quantitatively.
	3.NF.3.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.	**CC.MP.6.** - Model with mathematics.
	3.NF.3.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.	**CC.MP.7.** - Attend to precision.
	3.NF.3.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 results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.	**CC.MP.8.** - Look for and express regularity in repeated reasoning.

EXPECTATION: **CCSS.Math.Content.3.NF.A.3d** - 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 results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.	**3.G.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 1/4 of the area of the shape. **3.NF.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. **3.NF.2.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 and that the endpoint of the part based at 0 locates the number 1/b on the number line. **3.NF.2.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. **3.NF.3.a.** - Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. **3.NF.3.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.	**CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others. **CC.MP.3.** - Use appropriate tools strategically. **CC.MP.4.** - Look for and make use of structure. **CC.MP.5.** - Reason abstractly and quantitatively. **CC.MP.6.** - Model with mathematics.

	3.NF.3.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. **3.NF.3.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 results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.	**CC.MP.7.** - Attend to precision. **CC.MP.8.** - Look for and express regularity in repeated reasoning.
STANDARD: **CCSS.Math.Content.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.	**3.MD.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.	**CC.2.4.3.A.2.** - Tell and write time to the nearest minute and solve problems by calculating time intervals. **CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others. **CC.MP.3.** - Use appropriate tools strategically. **CC.MP.4.** - Look for and make use of structure. **CC.MP.5.** - Reason abstractly and quantitatively. **CC.MP.6.** - Model with mathematics. **CC.MP.7.** - Attend to precision. **CC.MP.8.** - Look for and express regularity in repeated reasoning.

STANDARD: **CCSS.Math.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.	**3.MD.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. **3.MD.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.	**CC.2.4.3.A.1.** - Solve problems involving measurement and estimation of temperature, liquid volume, mass, and length. **CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others. **CC.MP.3.** - Use appropriate tools strategically. **CC.MP.4.** - Look for and make use of structure. **CC.MP.5.** - Reason abstractly and quantitatively. **CC.MP.6.** - Model with mathematics. **CC.MP.7.** - Attend to precision. **CC.MP.8.** - Look for and express regularity in repeated reasoning.
STANDARD: **CCSS.Math.Content.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.	**3.MD.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.	**CC.2.4.3.A.4.** - Represent and interpret data using tally charts, tables, pictographs, line plots, and bar graphs. **CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others. **CC.MP.3.** - Use appropriate tools strategically.

		CC.MP.4. - Look for and make use of structure. **CC.MP.5.** - Reason abstractly and quantitatively. **CC.MP.6.** - Model with mathematics. **CC.MP.7.** - Attend to precision. **CC.MP.8.** - Look for and express regularity in repeated reasoning.
STANDARD: **CCSS.Math.Content.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.	**3.MD.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.	**CC.MP.1.** - Make sense of problems and persevere in solving them.
	3.MD.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.	**CC.MP.2.** - Construct viable arguments and critique the reasoning of others.
	3.NF.2.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 and that the endpoint of the part based at 0 locates the number 1/b on the number line.	**CC.MP.3.** - Use appropriate tools strategically.
	3.NF.2.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.	**CC.MP.4.** - Look for and make use of structure.

	3.NF.3.a. - Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. **3.NF.3.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.	**CC.MP.5.** - Reason abstractly and quantitatively. **CC.MP.6.** - Model with mathematics. **CC.MP.7.** - Attend to precision. **CC.MP.8.** - Look for and express regularity in repeated reasoning.
EXPECTATION: **CCSS.Math.Content.3.MD.C.5a** - 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.	**3.MD.5.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. **3.MD.5.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. **3.MD.6.** - Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units). **3.MD.7.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. **3.MD.7.b.** - Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning.	**CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others. **CC.MP.3.** - Use appropriate tools strategically. **CC.MP.4.** - Look for and make use of structure. **CC.MP.5.** - Reason abstractly and quantitatively.

	3.MD.7.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 × b and a × c. Use area models to represent the distributive property in mathematical reasoning.	**CC.MP.6.** - Model with mathematics.
	3.MD.7.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.	**CC.MP.7.** - Attend to precision.
	3.MD.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.	**CC.MP.8.** - Look for and express regularity in repeated reasoning.
EXPECTATION: **CCSS.Math.Content.3.MD.C.5b** - 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.	**3.MD.5.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.	**CC.MP.1.** - Make sense of problems and persevere in solving them.
	3.MD.5.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.	**CC.MP.2.** - Construct viable arguments and critique the reasoning of others.
	3.MD.6. - Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).	**CC.MP.3.** - Use appropriate tools strategically.
	3.MD.7.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.	**CC.MP.4.** - Look for and make use of structure.

	3.MD.7.b. - Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. **3.MD.7.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 × b and a × c. Use area models to represent the distributive property in mathematical reasoning. **3.MD.7.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. **3.MD.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.	**CC.MP.5.** - Reason abstractly and quantitatively. **CC.MP.6.** - Model with mathematics. **CC.MP.7.** - Attend to precision. **CC.MP.8.** - Look for and express regularity in repeated reasoning.
STANDARD: **CCSS.Math.Content.3.MD.C.6** - Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).	**3.MD.5.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. **3.MD.5.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. **3.MD.6.** - Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).	**CC.2.4.3.A.5.** - Determine the area of a rectangle and apply the concept to multiplication and to addition. **CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others.

	3.MD.7.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. **3.MD.7.b.** - Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. **3.MD.7.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 × b and a × c. Use area models to represent the distributive property in mathematical reasoning. **3.MD.7.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. **3.MD.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.	**CC.MP.3.** - Use appropriate tools strategically. **CC.MP.4.** - Look for and make use of structure. **CC.MP.5.** - Reason abstractly and quantitatively. **CC.MP.6.** - Model with mathematics. **CC.MP.7.** - Attend to precision. **CC.MP.8.** - Look for and express regularity in repeated reasoning.
EXPECTATION: **CCSS.Math.Content.3.MD.C.7a** - Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as	**3.MD.5.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.	**CC.2.4.3.A.5.** - Determine the area of a rectangle and apply the concept to multiplication and to addition.

would be found by multiplying the side lengths.	**3.MD.5.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.	**CC.MP.1.** - Make sense of problems and persevere in solving them.
	3.MD.6. - Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).	**CC.MP.2.** - Construct viable arguments and critique the reasoning of others.
	3.MD.7.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.	**CC.MP.3.** - Use appropriate tools strategically.
	3.MD.7.b. - Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning.	**CC.MP.4.** - Look for and make use of structure.
	3.MD.7.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 × b and a × c. Use area models to represent the distributive property in mathematical reasoning.	**CC.MP.5.** - Reason abstractly and quantitatively.
	3.MD.7.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.	**CC.MP.6.** - Model with mathematics.
	3.MD.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.	**CC.MP.7.** - Attend to precision.

	3.NBT.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. **3.OA.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 a context in which a total number of objects can be expressed as 5 × 7. **3.OA.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 a context in which a number of shares or a number of groups can be expressed as 56÷8. **3.OA.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. **3.OA.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 = ?.	**CC.MP.8.** - Look for and express regularity in repeated reasoning.

	3.OA.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.) **3.OA.6.** - Understand division as an unknown-factor problem. For example, find 32 ÷ 8 by finding the number that makes 32 when multiplied by 8. **3.OA.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. **3.OA.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.	
EXPECTATION: **CCSS.Math.Content.3.MD.C.7b** - Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving	**3.MD.5.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.	**CC.2.4.3.A.5.** - Determine the area of a rectangle and apply the concept to multiplication and to addition.

real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning.	**3.MD.5.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.	**CC.MP.1.** - Make sense of problems and persevere in solving them.
	3.MD.6. - Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).	**CC.MP.2.** - Construct viable arguments and critique the reasoning of others.
	3.MD.7.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.	**CC.MP.3.** - Use appropriate tools strategically.
	3.MD.7.b. - Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning.	**CC.MP.4.** - Look for and make use of structure.
	3.MD.7.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 × b and a × c. Use area models to represent the distributive property in mathematical reasoning.	**CC.MP.5.** - Reason abstractly and quantitatively.
	3.MD.7.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.	**CC.MP.6.** - Model with mathematics.
	3.MD.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.	**CC.MP.7.** - Attend to precision.

	3.NBT.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. **3.OA.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 a context in which a total number of objects can be expressed as 5 × 7. **3.OA.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 a context in which a number of shares or a number of groups can be expressed as 56÷8. **3.OA.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. **3.OA.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 = ?.	**CC.MP.8.** - Look for and express regularity in repeated reasoning.

	3.OA.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.) **3.OA.6.** - Understand division as an unknown-factor problem. For example, find 32 ÷ 8 by finding the number that makes 32 when multiplied by 8. **3.OA.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. **3.OA.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.	
EXPECTATION: **CCSS.Math.Content.3.MD.C.7c** - Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and	**3.MD.5.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.	**CC.MP.1.** - Make sense of problems and persevere in solving them.

b + c is the sum of a x b and a x c. Use area models to represent the distributive property in mathematical reasoning.	**3.MD.5.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.	**CC.MP.2.** - Construct viable arguments and critique the reasoning of others.
	3.MD.6. - Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).	**CC.MP.3.** - Use appropriate tools strategically.
	3.MD.7.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.	**CC.MP.4.** - Look for and make use of structure.
	3.MD.7.b. - Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning.	**CC.MP.5.** - Reason abstractly and quantitatively.
	3.MD.7.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 × b and a × c. Use area models to represent the distributive property in mathematical reasoning.	**CC.MP.6.** - Model with mathematics.
	3.MD.7.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.	**CC.MP.7.** - Attend to precision.
	3.MD.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.	**CC.MP.8.** - Look for and express regularity in repeated reasoning.

3.NBT.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.

3.NBT.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.

3.OA.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 a context in which a total number of objects can be expressed as 5 × 7.

3.OA.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 a context in which a number of shares or a number of groups can be expressed as 56÷8.

3.OA.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.

3.OA.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 = ?.

3.OA.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.)

3.OA.6. - Understand division as an unknown-factor problem. For example, find 32 ÷ 8 by finding the number that makes 32 when multiplied by 8.

3.OA.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.

3.OA.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.

	3.OA.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.	
EXPECTATION: **CCSS.Math.Content.3.MD.C.7d** - 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.	**3.MD.5.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. **3.MD.5.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. **3.MD.6.** - Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units). **3.MD.7.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. **3.MD.7.b.** - Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. **3.MD.7.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 × b and a × c. Use area models to represent the distributive property in mathematical reasoning.	**CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others. **CC.MP.3.** - Use appropriate tools strategically. **CC.MP.4.** - Look for and make use of structure. **CC.MP.5.** - Reason abstractly and quantitatively. **CC.MP.6.** - Model with mathematics.

	3.MD.7.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. **3.MD.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. **3.NBT.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. **3.OA.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 a context in which a total number of objects can be expressed as 5 × 7. **3.OA.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 a context in which a number of shares or a number of groups can be expressed as 56÷8.	**CC.MP.7.** - Attend to precision. **CC.MP.8.** - Look for and express regularity in repeated reasoning.

3.OA.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.

3.OA.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 = ?.

3.OA.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.)

3.OA.6. - Understand division as an unknown-factor problem. For example, find 32 ÷ 8 by finding the number that makes 32 when multiplied by 8.

3.OA.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.

	3.OA.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.	
STANDARD: **CCSS.Math.Content.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.	**3.MD.5.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. **3.MD.5.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. **3.MD.6.** - Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units). **3.MD.7.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. **3.MD.7.b.** - Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. **3.MD.7.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 × b and a × c. Use area models to represent the distributive property in mathematical reasoning.	**CC.2.4.3.A.6.** - Solve problems involving perimeters of polygons and distinguish between linear and area measures. **CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others. **CC.MP.3.** - Use appropriate tools strategically. **CC.MP.4.** - Look for and make use of structure. **CC.MP.5.** - Reason abstractly and quantitatively.

	3.MD.7.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. **3.MD.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.	**CC.MP.6.** - Model with mathematics. **CC.MP.7.** - Attend to precision. **CC.MP.8.** - Look for and express regularity in repeated reasoning.
STANDARD: **CCSS.Math.Content.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.	**3.G.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. **3.G.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 1/4 of the area of the shape.	**CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others. **CC.MP.3.** - Use appropriate tools strategically. **CC.MP.4.** - Look for and make use of structure. **CC.MP.5.** - Reason abstractly and quantitatively.

		CC.MP.6. - Model with mathematics. **CC.MP.7.** - Attend to precision. **CC.MP.8.** - Look for and express regularity in repeated reasoning.
STANDARD: **CCSS.Math.Content.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 1/4 of the area of the shape.	**3.G.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. **3.G.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 1/4 of the area of the shape. **3.NF.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. **3.NF.2.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 and that the endpoint of the part based at 0 locates the number 1/b on the number line.	**CC.2.3.3.A.2.** - Use the understanding of fractions to partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole. **CC.MP.1.** - Make sense of problems and persevere in solving them. **CC.MP.2.** - Construct viable arguments and critique the reasoning of others. **CC.MP.3.** - Use appropriate tools strategically.

	3.NF.2.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.	**CC.MP.4.** - Look for and make use of structure.
	3.NF.3.a. - Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.	**CC.MP.5.** - Reason abstractly and quantitatively.
	3.NF.3.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.	**CC.MP.6.** - Model with mathematics.
	3.NF.3.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.	**CC.MP.7.** - Attend to precision.
	3.NF.3.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 results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.	**CC.MP.8.** - Look for and express regularity in repeated reasoning.