

### Grade 3 EOY

Per the PARCC Calculator Policy, PARCC mathematics assessments for Grades 3 – 5 will not allow for calculator usage.

Evidence Statement Key	Evidence Statement Text	Clarifications	MP
3.OA.1	Interpret products of whole numbers, e.g., interpret $5 \times 7$ as the total number of objects in 5 groups of 7 objects each. <i>For example, describe a context in which a total number of objects can be expressed as <math>5 \times 7</math>.</i>	<ul style="list-style-type: none"> <li>i) Tasks involve interpreting products in terms of equal groups, arrays, area, and/or measurement quantities. See <a href="#">CCSS</a> Table 2, p. 89</li> <li>ii) Tasks do not require students to interpret products in terms of repeated addition, skip-counting, or jumps on the number line.</li> <li>iii) The italicized example refers to describing a context. But describing a context is not the only way to meet the standard. For example, another way to meet the standard would be to identify contexts in which a total can be expressed as a specified product.</li> </ul>	4, 2
3.OA.2	Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ 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. <i>For example, describe a context in which a number of shares or a number of groups can be expressed as <math>56 \div 8</math>.</i>	<ul style="list-style-type: none"> <li>i) Tasks involve interpreting quotients in terms of equal groups, arrays, area, and/or measurement quantities. See <a href="#">CCSS</a> Table 2, p. 89.</li> <li>ii) Tasks do not require students to interpret quotients in terms of repeated subtraction, skip-counting, or jumps on the number line.</li> <li>iii) The italicized example refers to describing a context. But describing a context is not the only way to meet the standard. For example, another way to meet the standard would be to identify contexts in which a number of objects can be expressed as a specified quotient.</li> <li>iv) 50% of tasks require interpreting quotients as a number of objects in each share. 50% of tasks require interpreting quotients as a number of equal shares.</li> </ul>	4, 2

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Evidence Statement Key	Evidence Statement Text	Clarifications	MP
3.OA.3-1	Use multiplication within 100 (both factors less than or equal to 10) to solve word problems in situations involving equal groups, arrays, or area, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	<ul style="list-style-type: none"> <li>i) All products come from the harder three quadrants of the times table (<math>a \times b</math> where <math>a &gt; 5</math> and/or <math>b &gt; 5</math>).</li> <li>ii) 50% of tasks involve multiplying to find the total number (equal groups, arrays); 50% involve multiplying to find the area.</li> <li>iii) For more information see <a href="#">CCSS</a> Table 2, p. 89 and the Progression document for <a href="#">Operations and Algebraic Thinking</a>.</li> </ul>	1, 4
3.OA.3-2	Use multiplication within 100 (both factors less than or equal to 10) to solve word problems in situations involving measurement quantities other than area, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	<ul style="list-style-type: none"> <li>i) All products come from the harder three quadrants of the times table (<math>a \times b</math> where <math>a &gt; b</math> and/or <math>b &gt; 5</math>).</li> <li>ii) Tasks involve multiplying to find a total measure (other than area).</li> <li>iii) For more information see <a href="#">CCSS</a> Table 2, p. 89 and the Progression document for <a href="#">Operations and Algebraic Thinking</a></li> </ul>	1, 4
3.OA.3-3	Use division within 100 (quotients related to products having both factors less than or equal to 10) to solve word problems in situations involving equal groups, arrays or area, e.g. by using drawings and equations with a symbol for the unknown number to represent the problem.	<ul style="list-style-type: none"> <li>i) All quotients are related to products from the harder three quadrants of the times table (<math>a \times b</math> where <math>a &gt; b</math> and/or <math>b &gt; 5</math>).</li> <li>ii) A third of tasks involve dividing to find the number in each equal group or in each equal row/column of an array; a third of tasks involve dividing to find the number of equal groups or the number of equal rows/columns of an array; a third of tasks involve dividing an area by a side length to find an unknown side length.</li> <li>iii) For more information see <a href="#">CCSS</a> Table 2, p. 89 and the Progression document for <a href="#">Operations and Algebraic Thinking</a></li> </ul>	1, 4
3.OA.3-4	Use division within 100 (quotients related to products having both factors less than or equal to 10) to solve word problems in situations involving measurement quantities other than area, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	<ul style="list-style-type: none"> <li>i) All quotients are related to products from the harder three quadrants of the times table (<math>a \times b</math> where <math>a &gt; b</math> and/or <math>b &gt; 5</math>).</li> <li>ii) 50% of tasks involve finding the number of equal pieces; 50% involve finding the measure of each piece.</li> <li>iii) For more information see <a href="#">CCSS</a> Table 2, p. 89 and the Progression document for <a href="#">Operations and Algebraic Thinking</a></li> </ul>	1, 4

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Evidence Statement Key	Evidence Statement Text	Clarifications	MP
3.OA.4	Determine the unknown whole number in a multiplication or division equation relating three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations <math>8 \times ? = 48</math>, <math>5 = \square \div 3</math>, <math>6 \times 6 = ?</math>.</i>	<ul style="list-style-type: none"> <li>i) Tasks do not have a context.</li> <li>ii) Only the answer is required (methods, representations, etc. are not assessed here).</li> <li>iii) All products and related quotients are from the harder three quadrants of the times table (<math>a \times b</math> where <math>a &gt; 5</math> and/or <math>b &gt; 5</math>).</li> </ul>	-
3.OA.7	Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$ , one knows $40 \div 5 = 8$ ) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.	<ul style="list-style-type: none"> <li>i) Tasks do not have a context.</li> <li>ii) Only the answer is required (strategies, representations, etc., are not assessed here).</li> <li>iii) Tasks require fluent (fast and accurate) finding of products and related quotients. For example, each one-point task might require four or more computations, two or more multiplication and two or more division.</li> <li>iv) 75% of tasks are from the harder three quadrants of the times table (<math>a \times b</math> where <math>a &gt; 5</math> and/or <math>b &gt; 5</math>).</li> </ul>	-
3.OA.8-1	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.	<ul style="list-style-type: none"> <li>i) Only the answer is required (methods, representations, etc., are not assessed here).</li> <li>ii) Addition, subtraction, multiplication and division situations in these problems may involve any of the basic situation types with unknowns in various positions (see <a href="#">CCSS</a> Tables 1-2, p. 88-and the Progression document for <a href="#">Operations and Algebraic Thinking</a>.)</li> <li>iii) If scaffolded, one of the 2 parts must require 2-steps. The other part many consist of 1-step.</li> <li>iv) Conversions should be part of the 2-steps and should not be a step on its own.</li> <li>v) If the item is 2 points, the item should be a 2 point, unscaffolded item but the rubric should allow for 2-1-0 points.</li> </ul>	1, 4
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.	<ul style="list-style-type: none"> <li>i) Tasks have no context.</li> </ul>	-
3.NBT.3	Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., $9 \times 80$ , $5 \times 60$ ) using strategies based on place value and properties of operations.	<ul style="list-style-type: none"> <li>i) Tasks have no context.</li> </ul>	7
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 $1/b$ .	<ul style="list-style-type: none"> <li>i) Tasks do not involve the number line.</li> </ul>	2

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Evidence Statement Key	Evidence Statement Text	Clarifications	MP
3.NF.2	<p>Understand a fraction as a number on the number line; represent fractions on a number line diagram.</p> <p>a) Represent a fraction <math>1/b</math> on a number line diagram by defining the interval from 0 to 1 as the whole and portioning it into <math>b</math> equal parts. Recognize that each part has size <math>1/b</math> and that the endpoint of the part based at 0 locates the number <math>1/b</math> on the number line.</p> <p>b) Represent a fraction <math>a/b</math> on a number line diagram by marking off lengths <math>1/b</math> from 0. Recognize that the resulting interval has size <math>a/b</math> and that its endpoint locates the number <math>a/b</math> on the number line.</p>	<p>i) Fractions may be greater than 1.</p> <p>ii) Fractions equal whole numbers in 20% of these tasks.</p> <p>iii) Tasks have “thin context” or no context.</p> <p>iv) Tasks are limited to fractions with denominators 2, 3, 4, 6, and 8. (See footnote <a href="#">CCSS</a> p 24)</p>	5
3.NF.3a-1	<p>Explain equivalence of fractions in special cases and compare fractions by reasoning about their size.</p> <p>a. Understand two fractions as equivalent (equal) if they are the same size.</p>	<p>i) Tasks do not involve the number line.</p> <p>ii) Tasks are limited to fractions with denominators 2, 3, 4, 6 and 8. (See footnote <a href="#">CCSS</a> p 24)</p> <p>iii) The explanation aspect of 3.NF.3 is not assessed here.</p>	5
3.NF.3a-2	<p>Explain equivalence of fractions in special cases and compare fractions by reasoning about their size.</p> <p>a. Understand two fractions as equivalent (equal) if they are the same point on a number line.</p>	<p>i) Tasks are limited to fractions with denominators 2, 3, 4, 6, and 8. (See footnote <a href="#">CCSS</a> p 24)</p> <p>ii) The explanation aspect of 3.NF.3 is not assessed here.</p>	5
3.NF.3b-1	<p>Explain equivalence of fractions in special cases and compare fractions by reasoning about their size.</p> <p>b. Recognize and generate simple equivalent fractions, e.g.,</p> $\frac{1}{2} = \frac{2}{4}, \frac{4}{6} = \frac{2}{3}.$	<p>i) Tasks are limited to fractions with denominators 2, 3, 4, 6, and 8 (See footnote, <a href="#">CCSS</a> p 24).</p> <p>ii) The explanation aspect of 3.NF.3 is not assessed here.</p>	7
3.NF.3c	<p>Explain equivalence of fractions in special cases and compare fractions by reasoning about their size.</p> <p>c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. <i>Examples:</i></p> <p><i>Express 3 in the form <math>3 = \frac{3}{1}</math>; recognize that <math>\frac{6}{1} = 6</math> locate <math>\frac{4}{4}</math> and 1 at the same point of a number line diagram.</i></p>	<p>i) Tasks are limited to fractions with denominators 2, 3, 4, 6, and 8. (See footnote <a href="#">CCSS</a> p 24)</p> <p>ii) The explanation aspect of 3.NF.3 is not assessed here.</p>	3, 7, 5

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3.NF.3d	Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. 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.	i) Tasks are limited to fractions with denominators 2, 3, 4, 6, and 8. (See footnote <a href="#">CCSS</a> p 24) ii) Justifying is not assessed here. iii) Prompts do not provide visual fraction models; students may at their discretion draw visual fraction models as a strategy.	7
3.NF.A.Int.1	In a contextual situation involving a whole number and two fractions not equal to a whole number, represent all three numbers on a number line diagram then choose the fraction closest in value to the whole number.	i) Whole numbers are limited to 0, 1, 2, 3, 4, 5. Fraction denominators are limited to 2, 3, 4.	2, 4, 5
3.MD.1-1	Tell and write time to the nearest minute and measure time intervals in minutes.	i) Time intervals are limited to 60 minutes ii) No more than 20% of items require determining a time interval from clock readings having different hour values Acceptable intervals: ex. Start time 1:20, end time 2:10 – time interval is 50 minutes. Unacceptable intervals: ex. Start time 1:20, end time 2:30 – time interval exceeds 60 minutes.	-
3.MD.1-2	Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.	i) Only the answer is required (methods, representations, etc. are not assessed here). ii) Tasks do not involve reading start/stop times from a clock nor calculating elapsed time.	1, 4, 2, 5
3.MD.2-1	Measure and estimate liquid volumes and masses of objects using standard units of grams(g), kilograms(kg), and liters(l).	None	-
3.MD.2-2	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.	i) Only the answer is required (methods, representations, etc. are not assessed here).	1, 4, 2, 5
3.MD.2-3	Measure or estimate liquid volumes or masses of objects using standard units of grams (g), kilograms (kg), and liters (l), then use the estimated values(s) to estimate the answer to a one-step word problem by using addition, subtraction, multiplication, or division. See 3.MD.2	None	6, and in the case of measuring 5

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3.MD.3-1	Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. <i>For example, draw a bar graph in which each square in the bar graph might represent 5 pets.</i>	i) Tasks involve no more than 10 items in 2-5 categories. ii) Tasks do not require students to create the entire graph, but might ask students to complete a graph or otherwise demonstrate knowledge of its creation.	2
3.MD.3-3	Solve a put-together problem using information presented in a scaled bar graph, then use the result to answer a “how many more” or “how many less” problem using information presented in the scaled bar graph. See 3.MD.3	i) Be careful that tasks do not require computations beyond the grade 3 expectations. See 4.NBT for computations expected only at the next grade.	4
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.	None	2, 5
3.MD.5	Recognize area as an attribute of plane figures and understand concepts of area measurement. a. A square with side length 1 unit, called “a unit square,” is said to have “one square unit” of area, and can be used to measure area. b. A plane figure which can be covered without gaps or overlaps by $n$ unit squares is said to have an area of $n$ square units.	None	7
3.MD.6	Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).	None	7
3.MD.7b-1	Relate area to the operations of multiplication and addition. d. Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real-world and mathematical problems.	i) Products are limited to the $10 \times 10$ multiplication table.	4, 5
3.MD.7d	Relate area to the operations of multiplication and addition. d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.	None	7

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Evidence Statement Key	Evidence Statement Text	Clarifications	MP
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.	None	4, 2, 5
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.	i) A trapezoid is defined as “A quadrilateral with at least one pair of parallel sides.”	-
3.G.2	Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. <i>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.</i>	None	-
3.Int.1	Given a two-step problem situation with the four operations, round the values in the problem, then use the rounded values to produce an approximate solution. See 3.OA.8, 3.NBT.1, 3.NBT.2, 3.NBT.3	i) Be careful that tasks do not require computations beyond the grade 3 expectations. See 4.NBT for computations expected only at the next grade.	4, 6
3.Int.2	Solve two-step word problems using the four operations requiring a substantial addition, subtraction, or multiplication step, drawing on knowledge and skills articulated in 3.NBT. See 3.OA.8, 3.NBT.2, and 3.NBT.3	i) Addition, subtraction, multiplication and division situations in these problems may involve any of the basic situation types with unknowns in various positions (see <a href="#">CCSS Table 1</a> , p. 88 and <a href="#">Table 2</a> , p. 89) and the Progression document for <a href="#">Operations and Algebraic Thinking</a> . Substantial (def.) – Values should be towards the higher end of the numbers identified in the standards. ii) If scaffolded, one of the 2 parts must require 2-steps. The other part many consist of 1-step. iii) Conversions should be part of the 2-steps and should not be a step on its own. iv) If the item is 2 points, the item should be a 2 point, unscaffolded item but the rubric should allow for 2-1-0 points.	1, 4

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3.Int.3	Solve real world and mathematical problems involving perimeters of polygons requiring a substantial addition, subtraction, or multiplication step, drawing on knowledge and skills articulated in 3.NBT. See 3.MD.8, 3.NBT.2, and 3.NBT.3	Substantial (def.) – Values should be towards the higher end of the numbers identified in the standards.	1, and if the problem has a real world context, 4
3.Int.4	Use information presented in a scaled bar graph to solve a two-step “how many more” or “how many less” problem requiring a substantial addition, subtraction, or multiplication step, drawing on knowledge and skills articulated in 3.NBT. See 3.MD.3, 3.NBT.2, and 3.NBT.3	Substantial (def.) – Values should be towards the higher end of the numbers identified in the standards.	1, 4, 2
3.Int.5	Add, subtract, or multiply to solve a one-step word problem involving masses or volumes that are given in the same units, where a substantial addition, subtraction, or multiplication step is required drawing on knowledge and skills articulated in 3.NBT, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem. See 3.MD.2, 3.NBT.2, and 3.NBT.3	Substantial (def.) – Values should be towards the higher end of the numbers identified in the standards.	1, 4, 2