

Grade 3 Math Standards Summary

Total Reviews	1142		Breakdown by Review Type											
Keep As Is	915	Educator			690	<p style="font-size: small;">Suggest Changes 20%</p> <p style="font-size: small;">Keep As Is 80%</p>								
		Elected Official	0											
		Institution or Higher Education Faculty	0											
		K-12 Administrator	111											
		Member of Organization	1											
		Other	94											
		Parent/Guardian	19											
		Student	0											
Suggest Changes	227	Educator	143	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">Change Suggestions</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Removed</td> <td style="text-align: center;">32</td> </tr> <tr> <td style="text-align: center;">Rewritten</td> <td style="text-align: center;">69</td> </tr> <tr> <td style="text-align: center;">Broken Up</td> <td style="text-align: center;">15</td> </tr> <tr> <td style="text-align: center;">Moved to a Different Level</td> <td style="text-align: center;">111</td> </tr> </tbody> </table>	Change Suggestions		Removed	32	Rewritten	69	Broken Up	15	Moved to a Different Level	111
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		Moved to a Different Level	111											
		Elected Official	0											
		Institution or Higher Education Faculty	5											
K-12 Administrator	2													
Member of Organization	0													
Other	4													
Parent/Guardian	73													
Student	0													

Number	Count of Keep	% of Keep	Count of Suggest Changes	% of Suggest Changes	Count of New Level	Count of New Description	Count of Broken	Count of Removed
Math.Content.3.G.A.1	29	76%	9	24%	3	3	2	1
Math.Content.3.G.A.2	33	89%	4	11%	3	0	0	1
Math.Content.3.MD.A.1	26	76%	8	24%	3	5	0	0
Math.Content.3.MD.A.2	25	66%	13	34%	3	7	3	0
Math.Content.3.MD.B.3	30	91%	3	9%	2	0	0	1
Math.Content.3.MD.B.4	27	79%	7	21%	4	0	0	3
Math.Content.3.MD.C.5a	23	88%	3	12%	2	1	0	0
Math.Content.3.MD.C.5b	24	86%	4	14%	2	1	0	1
Math.Content.3.MD.C.6	32	97%	1	3%	1	0	0	0
Math.Content.3.MD.C.7a	29	94%	2	6%	1	1	0	0
Math.Content.3.MD.C.7b	27	84%	5	16%	2	2	1	0
Math.Content.3.MD.C.7c	24	75%	8	25%	7	1	0	0
Math.Content.3.MD.C.7d	19	58%	14	42%	8	1	1	4
Math.Content.3.MD.D.8	25	78%	7	22%	3	2	1	1
Math.Content.3.NBT.A.1	28	85%	5	15%	3	2	0	0
Math.Content.3.NBT.A.2	29	85%	5	15%	2	1	0	2
Math.Content.3.NBT.A.3	30	91%	3	9%	1	1	0	1
Math.Content.3.NF.A.1	28	85%	5	15%	2	3	0	0
Math.Content.3.NF.A.2a	30	86%	5	14%	3	1	0	1
Math.Content.3.NF.A.2b	25	69%	11	31%	7	2	0	2
Math.Content.3.NF.A.3a	27	75%	9	25%	4	5	0	0
Math.Content.3.NF.A.3b	27	73%	10	27%	8	1	0	1

Math.Content.3. NF.A.3c	30	83%	6	17%	5	0	0	1
Math.Content.3. NF.A.3d	23	64%	13	36%	9	3	0	1
Math.Content.3. OA.A.1	36	90%	4	10%	1	3	0	0
Math.Content.3. OA.A.2	32	84%	6	16%	3	2	0	1
Math.Content.3. OA.A.3	33	89%	4	11%	1	1	0	2
Math.Content.3. OA.A.4	30	86%	5	14%	3	1	0	1
Math.Content.3. OA.B.5	30	83%	6	17%	1	4	0	1
Math.Content.3. OA.B.6	26	79%	7	21%	1	3	1	2
Math.Content.3. OA.C.7	30	81%	7	19%	2	4	0	1
Math.Content.3. OA.D.8	21	53%	19	48%	8	5	5	1
Math.Content.3. OA.D.9	27	75%	9	25%	3	3	1	2

Math.Content.3.G.A.1

Eliminate / break up cumbersome , drilled-down trivia at this grade level. For example, is a square a rectangle? Is a rectangle a square?

Other elements are suitable, such as the difference between a square and a trapezoid.

Please explain how you would break up the standard:

*Students need more background knowledge on shapes before attempting this standard.

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.

Understand quadrilaterals; draw examples of quadrilaterals; shapes that are similar in size or congruent.

Our kids are not going to learn uncalled for things.

Math.Content.3.G.A.2

This is a great standard. The focus of this standard is the new vocabulary of the "unit" fraction and that unit means 1 part of the whole.

Why do they need this?

Math.Content.3.MD.A.1

Tell and write time to the nearest hour, half hour, and minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes within the same hour, e.g., by representing the problem on a number line diagram.

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 of less than 60 minutes, e.g., by representing the problem on a number line diagram.

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,

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, within the same hour, e.g., by representing the problem on a number line diagram.

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.

Math.Content.3.MD.A.2

Measure and estimate lengths, weights, and liquid capacity using familiar standard units such as inches, feet, pounds, gallons, liters, etc. Add, subtract, multiply, or divide to solve one-step word problems.

[Justification: Students will develop a sense of what measurement is if they work with familiar units.]

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.,

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.

If estimation is vital, we need to stick with the US standard units. The students lack the background knowledge need to estimate metric.

Needs to add English units, at least oz. and lb., to the list of units to estimate.

Please explain how you would break up the standard:

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.

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Math.Content.3.MD.B.3

Age inappropriate.

Math.Content.3.MD.B.4

Line plots are antiquated and are not used on a regular basis in daily life. I'd rather students focus on bar graphs, line graphs, etc.

Not age appropriate

The students do not understand this concept.

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. Relate it to multiplication and an array.

This is a great correlation to multiplication and also shows that that multiplication is the same as repeated addition.

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.

I don't even understand this phrasing.

Math.Content.3.MD.C.6

Helps with the visual concept of relating area to multiplication.

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 would be found by multiplying the side lengths. Simplify by giving the standard definition. Find the area of a rectangle by multiplying the length by the width.

Math.Content.3.MD.C.7b

Multiply side length by width 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.

Please explain how you would break up the standard:

Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems.

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 $b + c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning.

Math.Content.3.MD.C.7d

Please explain how you would break up the standard:

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.

Apply area as additive to solve real world problems.

Developmentally inappropriate for children at this age. Finding the area of an L-shaped house, for example, was challenging enough for my students. Sample test items then took it one step further, to find the area outside the L (eg the backyard) to make a perfectly rectangular plot of land. Very confusing for children.

I see no reason why this is helpful.

Not age appropriate

Math.Content.3.MD.D.8

Please explain how you would break up the standard:

Identify the perimeters of polygons given the side lengths, finding the unknown side length and comparing to shapes with the same perimeter.

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.

Solve real world and mathematical problems involving perimeters of polygons of no more than 5 sides, 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.

Not age appropriate

Math.Content.3.NBT.A.1

Use place value understanding to round whole numbers to the nearest 10, 100, 1000.

Use place value understanding to round whole numbers to the nearest 10, 100, or 1,000.
Plainly written, so understandable and seems like something a 3rd grader should be able to grasp.
This has been a standard of 3rd grade for many years. It is a difficult concept to conquer, but is attainable.
Tough skill but absolutely has to be mastered by this grade level to build effective conceptual understanding in the upper grades.
Math.Content.3.NBT.A.2
At this grade high achieving countries disconnect their students from still meandering through “strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction” and simply expect their students to add and subtract within 10,000 using standard algorithms
Age inappropriate.
I don't understand this one...too vague
This is a continuation of concepts taught in earlier grades. It does involve new concepts such as subtracting across zeros and regrouping more than one place.
This standard is fine. HOWEVER, third graders still needs ALOT of work with time and money and both concepts are MISSING! I understand the purpose of Common Core is focus on depth of concept. I LOVE that! Third graders, in my 10 years of experience, still need quite a bit of help with these two concepts.
Math.Content.3.NBT.A.3
Multiply one-digit whole numbers by a 2-digit number using strategies based on place value and properties of operations.
Once students understand what multiplying times 10 looks like when multiplying times a 1 digit number, the student can see the pattern and relationship to multiplying any number times 10 would look like. This must be taught with place value in mind and with the aid of drawings.
Should not have to use several strategies to answer a problem. Each child has different methods of using. Inappropriate to expect each child to solve multiple ways.
Math.Content.3.NF.A.1
Understand a fraction $\frac{1}{b}$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction $\frac{a}{b}$ as the quantity formed by a parts of size $\frac{1}{b}$.
Understand a fraction $\frac{1}{b}$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction $\frac{a}{b}$ as the quantity formed by a parts of size $\frac{1}{b}$. Understand a fraction as representing part of a whole with $\frac{a}{b}$ where a represents a part and b represents a whole.
Understand a fraction as part of a whole when the whole is broken into equal parts.
conceptual-now if teachers will teach it this way.
This is an extension of previous years' standards on fractions.
Math.Content.3.NF.A.2a
Represent a fraction $\frac{1}{b}$ 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 $\frac{1}{b}$ and that the endpoint of the part based at 0 locates the number $\frac{1}{b}$ on the number line.
I like it, but the wording continues to be difficult to process and understand.
Keep this standard as written. It should be between 0 and 1 only because students are not familiar with improper fractions.

Not age appropriate

The number line is a very important tool for students to use for future grade levels.

Math.Content.3.NF.A.2b

Represent a fraction $\frac{a}{b}$ on a number line diagram by marking off a lengths $\frac{1}{b}$ from 0. Recognize that the resulting interval has size $\frac{a}{b}$ and that its endpoint locates the number $\frac{a}{b}$ on the number line.

Represent a fraction $\frac{a}{b}$ on a number line diagram by marking off a lengths $\frac{1}{b}$ from 0. Recognize that the resulting interval has size $\frac{a}{b}$ and that its endpoint locates the number $\frac{a}{b}$ on the number line.

I would simplify the standard and simply write "Represent a fraction $\frac{a}{b}$ on a number line diagram by marking off lengths $\frac{1}{b}$ from 0 and that the total number of lengths equal a whole.

Could be combined with part a.

Not appropriate for grade level

The number line is a very important tool for students to use for future grade levels.

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.

Move the number line to 4th, they struggle to make the connection to the number line and fractions.

Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number, given a visual model, or the number line.

Understand two fractions as equivalent (equal) if they represent the same quantity. For example, when we say that $\frac{1}{3}$ is equivalent to $\frac{2}{6}$, we mean that $\frac{1}{3}$ of a pound is the same weight as $\frac{2}{6}$ of a pound.

[Justification: Students in the third grade need concrete explanations of mathematical terms.]

Understand two fractions as equivalent (equal) visually if they are the same size, or the same point on a number line.

With the aid of a given diagram to represent two fractions, understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.

Math.Content.3.NF.A.3b

Recognize and generate simple equivalent fractions, (e.g., $\frac{1}{2} = \frac{2}{4}$, $\frac{4}{6} = \frac{2}{3}$). Explain why the fractions are equivalent, e.g., by using a given visual fraction model.

Age inappropriate.

Math.Content.3.NF.A.3c

3rd grade students are able understand the concept.

Not for third grade

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. The language is difficult to understand. I would teach a strategy to the student to compare the fractions and teach the meaning of the symbols.

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.

Just comparing visual models is all they can handle. They haven't mastered the understanding of fractions to compare without visuals.

Generally OK, but the interjection of "visual fraction model" serves to confuse and should be eliminated. Number line should be used throughout.

Not for third grade

Reasoning and persistence required. Good use of mathematical practices in this standard

With much work, students can understand that the more parts there are in a whole, the smaller the part. They then can understand and compare unit fractions with different denominators or fractions with different numerators and like denominators.

Math.Content.3.OA.A.1

Be able to multiply whole numbers, e.g., be able to calculate that 5×7 equals 35.

Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects in each group or 7 groups of 5 objects in each group.

Needs to say "interpret 5×7 as the total number of objects in 5 groups of 7 objects each or as 7 groups of 5 objects each"

I agree with the standard as written because we have taught this standard for many, many years and is age appropriate.

I am a strong supporter of Common Core State Standards, as I believe that these standards will help Louisiana children to become better prepared for the rigors of college, and/or to become better qualified for rewarding, well-paying careers. I recognize that Common Core State Standards were developed by the states---not by the federal government---and that they are not a prescribed curriculum, but rather are a set of standards that will empower Louisiana children to be elevated to the same levels of academic achievement as their counterparts in states that maintain high expectations for their students. Please do not pander to cynical, manipulative people with political agendas who claim that Common Core State Standards are something other than a set of academically ambitious standards that were developed by the states! Since it is in the interest of our great nation to provide ambitious academic standards for our students, true patriots who love America should be strong, vocal supporters of Common Core State Standards.

It is precise and to the point.

Math.Content.3.OA.A.2

Be able to divide whole numbers yielding whole number quotients, e.g., calculate $56 \div 8$ and determine that the quotient is 7.

I can guess why the standard is written the way it is now, but why not use "plain English" that parents can understand.

Interpret whole-number quotients of whole numbers. For example,

- i. $56 \text{ chairs} \div 8 \text{ chairs per row} = 7 \text{ rows}$.
- ii. $56 \text{ chairs} \div 8 \text{ rows} = 7 \text{ chairs per row}$.
- iii. $56 \text{ chairs} \div 7 \text{ chairs per row} = 8 \text{ rows}$.
- iv. $56 \text{ chairs} \div 7 \text{ rows} = 8 \text{ chairs per row}$.

Students should routinely use the word per to represent "for each" or "for every".

Age inappropriate.

It is precise and to the point.
Requires students to reason and rationalize the standard.
This standard is directly related to 3.OA.A.1. The students are able to understand the relationship between multiplication and division as they did with subtraction and addition.
Math.Content.3.OA.A.3
Use multiplication and division using factors up to 12 and dividends to 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.
Age inappropriate.
Students are still using concrete representations to solve abstract mathematic problems.
The way they had them do this was stupid
This standard is age appropriate and is an introduction to algebraic equations.
Math.Content.3.OA.A.4
Determine the unknown whole number in a multiplication equation relating three whole numbers. *Division should not be mastered into 4th grade.
Age inappropriate.
Math.Content.3.OA.B.5
Apply properties of operations as strategies to multiply and divide. Students should know how to use the commutative, associative, and distributive property.
Apply properties of operations as strategies to multiply.
Have an intuitive understanding that 5×7 and 7×5 are the same number. Also understand that $2 \times 3 \times 5$ can be written as 6×5 or 2×15 . Apply this understanding in finding products and quotients.
Also solve problems which are applications of the distributive property. For example: 2 bowls with 3 apples and 5 oranges in each bowl is how many apples and how many oranges? How many total fruit?
I wish I could rewrite this one, but I have an MS in Engineering and am not quite sure what this one means as written.
I like it although I think the distributive property of multiplication should be in a higher grade level. These kids do not need to learn how to use the distributive property to multiply basic facts. It only confuses them. That property comes in handy with larger multiplication problems which are seen in higher grades.
There is no need in this
This is a good introduction to the properties without requiring the student to know exactly which property.
Math.Content.3.OA.B.6
Please explain how you would break up the standard:
Understand division as an unknown-factor problem. (include examples)
Understand division as an unknown-factor problem, i.e. as the reverse of a multiplication problem where one of the factors is not known.
Understand the relationship between multiplication and division and that they are inverse operations.

All they need to know is how to multiply and divide. No need to get that detailed.

Asked and answered

Directly ties to multiplication. It is age appropriate.

Students need to understand that division is the inverse of multiplication.

Math.Content.3.OA.C.7

At this point Singapore expects "division with remainder" and "multiplication and division of numbers up to 3 digits by 1 digit" while the LA standards still meander through "strategies", "relationships," and "properties." □

It should be simple like.... "Know multiplication facts through 10×10 and related division facts, e.g., $9 \times 8 = 72$ and $72 \div 9 = 8$. Use these facts"

and

"Select, use, and explain various meanings and models of multiplication (through 10×10). Relate multiplication problems to corresponding division problems, e.g., draw a model to represent 5×6 and $30 \div 6$."

Fluently (What percent correct is 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.

Fluently multiply and divide factors to 12 and dividend to 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.

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.

*Division shouldn't be mastered until the 4th grade.

A good blend of reasoning, application and old fashioned memorization after the foundation of conceptual learning is built.

All students should know how to multiply and divide fluently in third grade. This will assist in preparing a foundation for other skills.

They are too young for this.

This is the major focus of 3rd grade. Students NEED to know the facts fluently without the use of a calculator because calculators are not allowed in 3rd grade any more.

Math.Content.3.OA.D.8

Please explain how you would break up the standard: Addition and Subtraction needs to be one and Multiplication and Division needs to be another. With a more focus on rounding.

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.

Please explain how you would break up the standard:

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.

Please explain how you would break up the standard:

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. I would simply say "Solve two-step word problems using the four operations."

Please explain how you would break up the standard:

Solve two-step word problems using the four operations. The following part should be moved to 5th grade. 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.

Please explain how you would break up the standard:

This standard should have a Part B beginning with "Assess ...using mental computation and a Part C , "Assess the reasonableness of answers using estimation strategies including rounding."

By third grade students should be able to solve two step word problems.

They need to learn more of the basics. They are being pushed to fast

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. This standard should be rewritten in language more user-friendly to the student. Maybe the first part of the standard would be sufficient.

Identify arithmetic patterns (including patterns in the addition table or multiplication table).

Please explain how you would break up the standard: The second sentence in the standard should be a saperate standard under 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.

Just teach the basics.

This is age appropriate. Students at this age are able to continue finding patterns in a more complex fashion.

This standard is fine. HOWEVER, third graders still need ALOT of practice with subtraction with regrouping. This standard is missing and needs to be added!!!

What is the necessity of learning this standard.