## PACING CHANGE

PLEASE FOLLOW YOUR DISTRICT DECISION ON PACING USING THE BOOK OR alternative M-STEP PACING CALENDAR...

## Unit 1, 2, 3, Unit 6, 7, Unit 5, Unit 4



JULY 22, 2016
OAISD

# Third Grade - Unit 5 <br> <br> Math Expressions Common Core Edition 

 <br> <br> Math Expressions Common Core Edition}

Hints to Unit 5
July 22, 2016

## Please note some changes have been made to the quizzes to better identify if initial learning has taken place.

- In grade 2 students may be able to solve add/sub problems with teen totals mentally
- Grade 3 solve mult./div with single digit factors mentally
- Grades 2-5 emphasize individual meaning making approaches to problems solving rather than require everyone write one equation for multi-step problems - encourage multiple equations and or drawings to solve
- Properties of operations are important to understand
- Encourage the math talk (555AA-BB)
- This means teach the word problem the SAME WAY you teach READING COMPREHENSION
- Restating could be drawing a picture

○

- Place value understanding and properties of operations are used to help understand the connection with the standard algorithm
- Encourage what kids know about equations and inverse operations to find a way to solve problems
- In Grade 2 the focus on understanding the meaning and properties of mult and div and on finding products of single-digit multiplying and related quotients are crucial skills to understand!!
Problem solving process.
Make Sense of the language: replace words they don't know with different words
Mathematize the Situation: restate the next sentence with any information they discovered in the first sentence Find the Answer: if you need to solve something from the first sentence, use an equation or drawing REPEAT until all the sentences have been replace with new information or the final question has been answered Check the answer: make sure the answer or answers make sense
- Situation Equation: shows the structure of the information in a problem
- Solution Equation: shows what operation is needed to solve a problem
- Comparison Problems: these are just a tool to show the larger number, the smaller number, and a space holder to make the 2 bars the same (the space holder will decide if you should add or subtract to make the bars even)
- GRADE 3 MUST understand the meaning and properties of multiplication and division and on finding products of single-digit multiplying and related quotients. These skills are CRUCIAL - students will rely on them for years to come as they learn to multiply and divide with multi-digit whole numbers and to add, sub, mult, and divide with fraction and with decimals.


## Please read over page 555FF

This shows how to cross out information or circle important information
Parentheses are used and practiced in equations so fluency using these rules can happen by grade 6!
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## Second Grade skills...

Solved simple two-step problems and mastered all of the problem situations using addition and subtraction within 20

Please note if students are not able to do this - these foundational skills MUST be practiced and interventions taken place before this unit begins!

## Third Grade...

Situation solution is the order of the numbers in the equation - The equation or drawing could look different than the way you are use to seeing equations (MAKE SURE YOU PRACTICE ALL EIGHT EQUATIONS!!)
Solution is any way you want to solve the situation you just came up with.
** do not rearrange numbers in the problem and do not try to fit numbers into equations that do not make sense**

Mathematize the problems!!

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## Extra Notes from Karen Fuson (in blue) - in regards to the responses from the rigorous Unit 5 Test

It is a challenge to write tests using formats on state tests with which one does not necessarily agree. And we want to walk a line between preparing students and overwhelming them.

I notice that several items ask students to explain a strategy. This will take a lot of time and be difficult for some students. Of course we want students to be able to explain their thinking, but for third graders, oral explanations are more appropriate. If your state test cannot really grade such response, I would cross them out for this test and depend on the Math Talk teachers are doing in class.

1) It uses so much algebra! It seems tremendously out of line with what 3rd grades should be able to do. The teaching from the chapters does NOT prepare the kids for this.

Third graders are supposed to start using equations with a letter for the unknown quantity. But 6 out of 15 seems like too many. Tell your students that any time they see a letter, they can draw a box around that letter and just think about the letter as if it is an unknown box. 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.

The three points below have merit. For now, you should just edit the test yourselves to make it clearer.
2) We think the wording and structure of the test are confusing. Items said to be "numbered" are actually not numbers at all, but letters, Ex. 8a8d. Ex. One says write the needed information, but it isn't there. It is missing. Students need to know that they are expected to create the information that is missing to be able to solve the problem.
3) Other parts are set up where choices are given, but only 1 needs to be selected. This is confusing, as they look a lot like those "numbered" $8 \mathrm{a}-8 \mathrm{~d}$, that all need to be answered.
4) If students need to do four different things for one question, then it should be very clear to them that they need 4 different parts to their answers. With one answer now being expected to be written in the box and one written on the line, and labels expected on some, but given on others, it is just confusing. This structure turns it into a reading proficiency test. Those not great at reading, do not do well, and take hours to finish. A suggestion would be for students to have a specified line for every answer, numbered in order, so they know what is expected without having to read and reread. I understand we are trying to mimic the M-Step, but quite frankly if that is written like this, it is also out of line with developmental appropriateness.

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5) It would be very helpful to get an answer key and a rubric for grading.

We are glad we are trying the rigor tests and do see the big benefit in having our students learn to problem solve. We are working already to add problems so the students have some experience with more rigorous ones. However, the previous chapter rigor tests have been doable. This one, I am dreading, as I know even my smartest students will have great anxiety over this and not master every problem.

With the fixes I have suggested, how true is this? Are there particular items that seem way too difficult? If so, I recommend that you give and discuss those in class. This review test is about preparing students in supportive ways, not giving them doubts about themselves. You know your students. Fix this to work for them. I appreciate your feedback and will be interested in how you resolve this. And I'm sorry that this test seems overambitious and has the flaws you have pointed out.

Personally, I am honored that the author of the Math Expressions Program is giving us such personal support/advice. I hope that everyone reading this respects all parts of putting together a National Program and notices the impact we potentially have on all users of this exceptional program. - Robyn Decker

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## March 2017

3/6 Begin Unit 5
3/15 Unit 5 Quick Quiz 1
3/16 Re-teaching day for Unit 5 Quiz 1 (Mastery Learning Loop protocols)
3/22 Unit 5 Quick Quiz 2
3/23 Re-teaching day for Unit 5 Quiz 2 (Mastery Learning Loop protocols)
3/24 Math Practice Lesson from Unit 5
3/27-3/31 Window of days to utilize the Mastery Learning Loop and take the Performance Task from Unit 7 - optional to take the Unit 5 test 3/27-3/31 Interim Test over Units 1-3, \& 5-7 (will not cover Unit 4) - use this data to drive extra math time re-teaching over prior unit content before M-Step


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| Pacing at a Glance |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Unit | 1 day for each Lessons <br> Some special cases where lessons take more than one day are accounted for and are shown in the detailed pacing guide | 1 day to reteach any concepts/strategies from the quiz | 1 test per unit 2-3 days for mastery | Instructional Days <br> (Including Mastery Learning Loop) |
| 1 | 19 | $\begin{gathered} 4 \text { days } \\ \text { (4 quizzes) } \end{gathered}$ | 2-3 | 25-26 |
| 2 | 15 | $\begin{gathered} 2 \text { days } \\ \text { (2 quizzes) } \end{gathered}$ | 2-3 | 19-20 |
| 3 | 15 | 3 | 2-3 | 20-21 |
| 4 | 18 | 3 | 2-3 | 23-24 |
| 5 | 11 | 2 | 2-3 | 15-16 |
| 6 | 11 | 2 | 2-3 | 15-16 |
| 7 | 9 | 2 | 2-3 | 13-14 |
|  |  |  |  |  |
| Total | 98 | 18 | 14-21 | 131-138 |

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| GRADE 3 <br> Math Rtl Grade 2 CCSS MX Teacher Edition |  |
| :---: | :---: |
| Identify numbers to 1,000 <br> 2.NBT. 3 | Unit 2 Lesson 1 Ones, tens and hundreds <br> Unit 2 Lesson 2 Activity 1 Draw Quick 10s and 100s <br> Unit 2 Lesson 3 Activity 2 Expanded form, Activity 3 Read, Write names |
| Mentally add and subtract 10 or 100 to an umber between 100 and 900 <br> 2.NBT. 8 | Unit 2 Lesson 4 Activity 3 Add 1, 10, 100 to a number |
| Compare numbers to 1,000 2.NBT. 4 | Unit 2 Lesson 5 Compare within 200 Unit 6 Lesson 3 Compare 3 digit numbers |
| Add 2-digit numbers <br> 2.NBT.5a | Unit 2 Lesson 7 Show all totals Unit 2 Lesson 8 Activity 1 New groups below Unit 2 Lesson 13 Activity 2 Game addition |
| Subtract 2-digit numbers <br> 2.NBT.5b | Unit 4 Lesson 3 <br> Unit 4 Lesson 8 When to ungroup <br> Unit 4 Lesson 5 Methods <br> Unit 4 Lesson 7 Subtract from 200 <br> Unit 4 Lesson 9 Zeros <br> Unit 4 Lesson 11 Game subtraction |

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| Grade 4 Rtl Standards <br> Readiness Standards - found in Grade 3 Units- Essential for Grade 4 |  |
| :---: | :---: |
| Grade 3 CCSS MX Teacher Edition |  |
| Add 3 digit numbers 3.NBT.2a | Unit 4 Lesson 1 Activity $1 \& 2$ Place Value drawings Unit 4 Lesson 2 Activity $1 \& 2$ secret code cards Unit 4 Lesson 5 Activity 1 rounding Unit 4 Lesson 7 Activity $1 \& 2$ methods Unit 4 Lesson 9 Activity 1 grouping |
| Subtract 3-digit numbers 3.NBT.2b | Unit 4 Lesson 11 Activity 1 methods Unit 4 Lesson 12 Activity $1,2 \& 3$ zeros Unit 4 Lesson 13 Activity 1 methods Unit 4 Lesson 14 Activity 1 diagrams |
| $\begin{aligned} & \text { Multiply numbers from 0-10 } \\ & \text { 3.OA.7a } \end{aligned}$ | Unit 1 Lesson 1 All Activities Unit 1 Lesson 2 All Activities Unit 1 Lesson 3 Activities $3 \& 4$ area model Unit 1 Lesson 11 Activity $1 \& 2$ methods Unit 1 Lesson 15 Activity 4 associative property Unit 2 Lesson 1 Activity $1 \& 2$ Strategies for 6 s Unit 2 Lesson 3 Activity 3 Strategies for 8s Unit 2 Lesson 5 Activity 2 Strategies for 7s |
| Multiplication and Division Games | Unit 1 Lesson 17 Activity 2 Unit 2 Lesson 7 Activity 2 |
| Divide numbers by 1 to 10 3.OA.7b | Unit 1 Lesson 4 Activity $2 \& 3$ <br> Unit 1 Lesson 11 Activity 2 strategy cards Unit 1 Lesson 15 Activity 4 division rules |
| Identify fractions and their parts. 3.NF. 1 | Unit 7 Lesson 1 Activity 1\&2 Unit 7 Lesson 2 All |
| Identify fractions on a number line. 3.NF. 2 | Unit 7 Lesson 2 Activity 1 bars, Activity $2 \& 3$ lines Unit 7 Lesson 3 Activity 1\&2 locate on lines |
| Compare fractions with the same numerator or same denominator. 3.NF.3d | Unit 7 Lesson 4 \& 5 All <br> Unit 7 Lesson 6 \& 7 All equivalence |

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## Unit 5

Are you using math sense making to about math structure using math drawings to support math explaining?
Big Idea 1: Types of Word Problems

| Lesson | Quick Practice | Materials | Common Core Standard/Practice | Words To Use |
| :---: | :---: | :---: | :---: | :---: |
| 5.1 | Goal: Practice multiplications and divisions. <br> Practice with Product Cards Practice with $6 \mathrm{~s}, 7 \mathrm{~s}$, and 8 s . | $\begin{aligned} & \text { SAB: 257-262 } \\ & \text { SHC: 257-262 \& AB: 159-160 } \\ & \text { (family Letter included) } \\ & \text { HR: 213-214 } \end{aligned}$ | MP: 1,2,3,4,6,7,8 <br> CC.3.NBT. 2 | Unknown, Addend, Equation, Total, Sum, Equality, Inequality, Add To, Take From, Put Together/Take Apart, Expression |
| Lesson <br> Focus | Solve addition and subtraction word problems. |  |  |  |
| Formative Assessment | Ask students to summarize what methods they learned for solving addition and subtraction word problems. Present the following problem, questions, and instructions to students: Cory had 12 grapes. He ate 4 of them. How many grapes does he have now? <br> - Is the problem an Add To or a Take From problem? <br> Then have students: <br> - Draw a Math Mountain for the problem <br> - Write an equation for the problem. <br> Solve the problem. |  |  |  |
| I CAN... <br> Learning <br> Targets | Instructional Strategies: <br> Student Outcome: <br> A1: Discuss Math Mountains, review types of word problems, and understand equality. <br> A2: Explore math language for addition and subtraction equations. |  |  |  |
| Notes | Lessons 1-3 will identify addends and the total and on relationship among these 3 quantities to find unknown number **this activity should show you how kids are solving the problems - focus all on discussion NOT instruction Use $=$ and $\neq$ to explain what equals means! ...has the same value.... |  |  |  |

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| 5.2 | Goal: Practice multiplications and divisions. <br> Practice with Product Cards Practice with $3 \mathrm{~s}, 4 \mathrm{~s}$, and 9 s . | SAB: 263-266 <br> SHC: 263-266 <br> HR: 215-216 | $\begin{aligned} & \text { MP: 1,2,3,4,6,7 } \\ & \text { CC.3.NBT.2, } \\ & \text { CC.3.OA.3, } \\ & \text { CC.3.OA.4 } \end{aligned}$ | Put Together/Take Apart, Add To, Take From |
| :---: | :---: | :---: | :---: | :---: |
| Lesson Focus | Represent and solve word problems with unknown addends and unknown factors. |  |  |  |
| Formative Assessment | Have volunteers give a word problem with an unknown addend and another problem with an unknown factor. Then ask students to write an equation to solve each problem. |  |  |  |
| I CAN... <br> Learning Targets | Instructional Strategies: <br> Student Outcome: <br> A1: Review the relationship between addition and subtraction and between multiplication and division. <br> A2: Solve word problems with unknown addends. <br> A3: Solve word problems with unknown factors. |  |  |  |
| Notes | Read 555CC-555FF You will need lesson 1 homework page 213 Make sure kids understand categories - boys and girls are children - rename to match the label that is one step to mathematizing |  |  |  |
| 5.3 | Goal: Practice multiplications and divisions <br> Practice with Product Cards Practice with $2 \mathrm{~s}, 5 \mathrm{~s}$, and 10 s | $\begin{aligned} & \text { SAB: } 267-270 \\ & \text { SHC: 267-270 } \\ & \text { HR: 217-218 } \end{aligned}$ | $\begin{array}{\|l\|} \hline \text { MP: 1,2,3,6,7 } \\ \text { CC.3.NBT.2, } \\ \text { CC.3.OA.3, } \\ \text { CC.3.OA.4 } \end{array}$ | Unknown start, Situation equation Solution equation |
| Lesson Focus | Solve word problems with unknown starts and write situation and solution equations for word problems. |  |  |  |
| Formative Assessment | Ask students to explain what a situation equation and a solution equation are. Students should explain that a situation equation shows the order of the information in the problem and a solution equation shows the operation that can be used to solve the problem. |  |  |  |
| I CAN... | Instructional Strategies: <br> Student Outcome: <br> A1: Review word problems with unknown addends and factors. |  |  |  |

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| Learning Targets | A2: Solve unknown start word problems in addition and subtraction. <br> A3: Write and solve equations for word problems with unknown factors and unknown dividends. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Notes | Read 555CC-555FF Make sure students know the if they are solving for the total or unknown addend This is the first time working on unknown start problems - a lot more practice will happen (encourage them to rewrite equation so it is easier to solve) You will start using letter to represent missing numbers - but this is an effort to enforce labeling all the numbers in a problem you are solving. |  |  |  |
| 5.4 | Practice multiplications and divisions. <br> Practice with Product Cards <br> Write Multistep Word <br> Problems <br> Practice with $6 \mathrm{~s}, 7 \mathrm{~s}$, and 8 s | SAB: 271-274 <br> SHC: 271-274 <br> HR: 219-220 (could be included in student portfolio) | MP: 1,2,3,4,5,6,7,8 <br> CC.3.NBT. 1 <br> CC.3.NBT. 2 | Compare, Equal to (=), Greater than (>), Less than (<) |
| Lesson <br> Focus | Solve comparison word problems. |  |  |  |
| Formative Assessment | Write a comparison problem with an unknown difference on the board. Students should draw comparison bars then write an equation to solve the problem. |  |  |  |
| I CAN... <br> Learning Targets | Instructional Strategies: <br> Student Outcome: <br> A1: Compare and order whole numbers. <br> A2: Solve comparison problems with an unknown amount. <br> A3: Use comparison bars to represent unknown amounts. |  |  |  |
| Notes | Read 555CC-555FF ${ }^{* *}$ another idea for comparing using structure- ask using place value language - line up numbers, then ask about each value and ask if they have the same/greater/less number ** place the <,> symbols in the room with greater than and less than labeled so they learn to READ the symbol as a word (less than when the start of the symbol has one point, greater than when the symbol has 2 points first) <br> Make sure kids know comparing numbers you start the place farthest left because that has the greatest value <br> Focus on language for comparison problems - more less and be able to reverse the way it can be stated <br> Also bars do not have to be drawn to scale!! Just the one that is longer looks longer <br> Finding unknown amounts instead of differences the students will need to determine who has more and who has fewer (SAB <br> 272) This will help them decide what number is added or subtracted <br> Comparison bars are used in MX in the standards it is the same as the tape diagram |  |  |  |

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| 5.5 | Goal: Practice multiplications and divisions. <br> Practice with Product Cards Practice with $3 \mathrm{~s}, 4 \mathrm{~s}$, and 9 s | $\begin{aligned} & \text { SAB: } 275-276 \\ & \text { SHC: 275-276 } \\ & \text { HR: 221-222 } \end{aligned}$ | MP: 1,3,6,7 <br> CC.3.NBT. 2 | Comparison problem, Comparison bars, Unknown amount |
| :---: | :---: | :---: | :---: | :---: |
| Lesson Focus | Represent and solve comparison word problems with misleading language. |  |  |  |
| Formative Assessment | Ask students to explain how they can make sense of a problem with misleading language. Students should be able to explain that if they can't use the problem as it is stated to determine who has more or fewer, they can find the comparison statement in the problem and restate it in terms of the other person in the problem. |  |  |  |
| I CAN... <br> Learning Targets | Instructional Strategies: <br> Student Outcome: <br> A1: Represent and solve comparison problems that have misleading language. <br> A2: Solve comparison problems that do not include the words more or fewer. |  |  |  |
| Notes | Read 555CCC-555FF ${ }^{* *}$ make sure the comparison bars are represented correctly <br> Labeling comparison bars for restating the problems will help any confusion with these problems - again comparison bars if drawn with labels of the numbers inside will help the kids see how to make them the same length. <br> Read note 598 and 600!!! |  |  |  |
| 5.6 | Goal: Practice multiplications and divisions. <br> Practice with Product Cards. Practice with $6 \mathrm{~s}, 7 \mathrm{~s}$, and 8 s . | SAB: 277-280 <br> SHC: 277-280 <br> Quick Quiz 1- use alternative <br> quiz <br> Fluency check 4 <br> HR: 223-224 (could be included in student portfolio) | MP: 1,3,6 $\text { CC.3.NBT. } 2$ |  |
| Lesson <br> Focus | Represent and solve word problems with extra, hidden, or not enough information. |  |  |  |
| Formative Assessment | Ask students to write and solve one example each of problems with extra, hidden, or not enough information. |  |  |  |

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| I CAN... <br> Learning Targets | Instructional Strategies: <br> Student Outcome: <br> A1: Recognize and solve word problems with extra or hidden information. <br> A2: Recognize and solve word problems with not enough information. |  |  |
| :---: | :---: | :---: | :---: |
| Notes | Read 555FF-555GG Crossing out extra info is good - just be careful not to cross out too much! This will help to mathematize all word problems! Highlighters work well too - every time kids eliminate info or replace words please have them say it out loud (putting it in their own words) |  |  |
| Suggest using Revised Unit 5 Quiz 1 |  |  |  |
| Revised Quick Quiz 1-1 Day for reteaching <br> Give quiz after teaching lesson 6 - then take this day to reteach/enrich per each quiz item. <br> This quiz will allow you to see if initial learning took place. If it did not the extra day is spent to spend more time with only those students that need help on the specific items on the quiz, in order to be more successful for the next Big Idea. If kids are doing well, take the time to enrich using the Differentiated Cards, or other higher order thinking activities. This time spent on re-teaching or enrichment will allow for you to keep on pace with not over teaching to only a select few that may need help, it also allows for the enrichment for students who need more of a challenge to go deeper with their understanding. Designated stopping at critical times helps eliminate unorganized re-teaching times during a lesson/activity. <br> Found on OAISD Math Resources K-5 |  |  |  |
| Fluency Check |  |  |  |
| Big Idea 2: Picture Graphs |  |  |  |
| 5.7 | Goal: Practice multiplications and divisions. <br> Practice with Product Cards Practice with $6 \mathrm{~s}, 7 \mathrm{~s}$, and 8 s . | $\begin{aligned} & \text { SAB: } 281-282 \\ & \text { SHC: 281-282 } \\ & \text { HR: 225-226 } \end{aligned}$ | $\begin{aligned} & \text { MP: 1,3,6 } \\ & \text { CC.3.OA.3, CC.3.OA. } \end{aligned}$ |
| Lesson <br> Focus | Use addition, subtraction, multiplication, and division to solve two step problems. |  |  |
| Formative Assessment | Ask students how they know a problem is a two step problem. Students' explanations should include that when they read the problem to make sense of it, they realize that a single number is needed in order to do the second step, which will solve the problem and answer the questions asked. |  |  |
| I CAN... | Instructional Strategies: Student Outcome: |  |  |

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| Learning Targets | A1: Write and solve first step questions for two step problems. <br> A2: Use first step questions and answers to solve two step problems. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Notes | Read $555 \mathrm{HH}-555 \mathrm{II}$ Continue to teach word problems the same way you teach reading comprehension. One sentence at a time, make sense of it (by solving with equation or showing what you know with a drawing) then move to the next sentence and replace with any new information you found out from the first sentence. |  |  |  |
| 5.8 | Goal: Practice multiplications and divisions. <br> Practice with Product Cards <br> Practice with $3 \mathrm{~s}, 4 \mathrm{~s}$, and 9 s | $\begin{aligned} & \text { SAB: 283-286 } \\ & \text { SHC: 283-286 } \\ & \text { HR: 227-228 } \end{aligned}$ | $\begin{aligned} & \text { MP: 1,2,3,4,6,7 } \\ & \text { CC.3.NBT.2, CC.3.OA.3, } \\ & \text { CC.3.OA.8 } \end{aligned}$ |  |
| Lesson <br> Focus | Solve word problems requiring two steps. |  |  |  |
| Formative Assessment | Ask students to write an equation involving two steps. Then explain how they could assess the reasonableness of the answer using a mental math strategy. Students should explain the strategy they used for their numbers. |  |  |  |
| I CAN... <br> Learning Targets | Instructional Strategies: <br> Student Outcome: <br> A1: Represent and solve two step word problems. <br> A2: Assess reasonableness of answers using rounding and mental math strategies. |  |  |  |
| Notes | Read 555HH-555II <br> Students write equations to represent problems solved using 2 steps - may need parentheses to decide which operation is performed first - encourage drawings!!! <br> Break apart strategy - breaks numbers apart by place value - then add the differences |  |  |  |
| 5.9 | Goal: Practice multiplications and divisions. <br> Practice with Product Cards. Practice with $2 \mathrm{~s}, 5 \mathrm{~s}$, and 10 s . | SAB: 287-288 <br> SHC: 287-288 <br> HR: 229-230 (could be included in student Portfolio) | $\begin{aligned} & \hline \text { MP: 1,3,4,8 } \\ & \text { CC.3.NBT.2, СС.3.OA.3, } \\ & \text { CC.3.OA.8 } \end{aligned}$ | Associate Property of Addition. Commutative Property of Addition, Identity Property of Addition, Associative Property of Multiplication, Commutative Property of Multiplication, Identity Property of Multiplication, Zero Property of Multiplication, Distributive Property of |

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|  |  |  |  | Multiplication |
| :---: | :---: | :---: | :---: | :---: |
| Lesson Focus | Solve word problems requiring two operations. |  |  |  |
| Formative Assessment | Write this problem on the board. Jared has 2 boxes in his room. Each box contains a number of trays, and each tray contains 2 miniature trucks. Jared has 16 trucks in all. Ask students to write an equation with a variable to solve the problem and explain how they would solve it. Students should write $2 \times t \times 2=16, t=4$. |  |  |  |
| I CAN... <br> Learning Targets | Instructional Strategies: <br> Student Outcome: <br> A1: Review the properties of addition and multiplication. <br> A2: Write equations to solve two step word problems. |  |  |  |
| Notes | Read 555HH-555II Guide students through an in depth review of properties of operations with a focus on how these make it easier. Formal names of properties are not necessary, but using them correctly is! Pictures, objects diagrams help some kids!! |  |  |  |
| 5.10 | Goal: Practice multiplications and divisions. <br> Practice with Product Cards Practice with $6 \mathrm{~s}, 7 \mathrm{~s}$, and 8 s . | SAB: 289-290 <br> SHC: 289-290 <br> Quick Quiz 2 found in lesson 11 use alternate quiz <br> HR: 231-232 | MP: 1,3,4,6 CC.3.NBT. 1 CC.3.NBT. 2 | Grouping |
| Lesson Focus | Solve word problems using two step equations and decide if answers are reasonable. |  |  |  |
| Formative Assessment | Ask students to choose one of the problems on a Student Book page 290 and write a two step equation to represent the problem. Students should be able to explain how they decided which operations to use in the equation and which number is the unknown number they are trying to find. |  |  |  |
| I CAN... Learning Targets | Instructional Strategies: <br> Student Outcome: <br> A1: Review solving two step word problems and decide if the answer is reasonable by using rounding and mental math. <br> A2: Write and solve two step equations to represent word problems. |  |  |  |
| Notes | Read 555HH-555II |  |  |  |

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## Fluency Check

## Suggest using Revised Unit 5 Quick Quiz 2

Revised Quick Quiz 2 (found at the end of lesson 11) - 1 Day for reteaching
Give quiz after teaching lesson 10 - then take this day to reteach/enrich per each quiz item.
Found on OAISD Math Resources K-5

| 5.11 | If you would like to include Quick Practice with this lesson, use the Quick Practice provided in Lesson 1 | SAB: 291-292 <br> SHC: 291-292 <br> Quick Quiz 3 but give after lesson 17 <br> Fluency check HR: 233-234 (could be included in student portfolio) | MP: 1,2,3,4,5,6,7,8 <br> CC.3.NBT. 1 <br> CC.3.NBT. 2 |  |
| :---: | :---: | :---: | :---: | :---: |
| Lesson Focus | Use the Common Core Content Standards and Practices in a variety of real world problem solving situations. |  |  |  |
| Formative Assessment | n/a |  |  |  |
| I CAN... <br> Learning Targets | Instructional Strategies: <br> Student Outcome: <br> A1: 1. Makes sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 4. Model with mathematics. 5. Use appropriate tools strategically. <br> A2: 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning. <br> A3: 3. Construct a viable argument and critique the reasoning of others. 6. Attend to precision. |  |  |  |
| Notes | Read 413II |  |  |  |

## Unit 5

Balanced Assessment Resources and Protocols
The balanced assessment protocols allow to check back on previous units to determine if students are maintaining the prior knowledge and/or allow students another chance to demonstrate mastery of prior unit content.

# Third Grade - Unit 5 <br> Math Expressions Common Core Edition 

July 22, 2016

## Unit 5 Test and Review - Suggested to SKIP Unit 5 test

This unit test is considered optional - if you replace it with the Interim Assessment.
Please use your discretion or your district assessment plan on administering this test.

## Interim Assessment

This covers content over Unit 1-3 and 5-7. There are a few questions over Units 1-3, 6-7 and few more questions from Unit 5. The interim assessment (both an A and B test with the same rigor) is found online through InQwizIT, or a paper copy is found on OAISD Math Resources K-5.
Data results from the Interim Assessment might offer standards to be addressed through additional Math Rtl time (re-teaching opportunities).

## Performance Task

Use the Unit 7 Performance Task to incorporate the balanced assessment review of a higher depth of knowledge to check students understanding of the application of the prior unit's concepts and strategies.
This performance task might be taught as a whole group, small group or in pairs. The requirements of taking a task might still be new to students so you may want to take one day to both review the rubrics and strategies to thoroughly answer all parts of the task. The role of the teacher to facilitate the Math Talk will be a critical piece to having the students take ownership of their learning and ability to complete the Performance Task.

