Grade Level	5th Grade	**Content Area**	Math
Course Title (grades 9-12 Only)			
Length of Unit	16 days	**Time of Year**	Fall, qtr 1
Expected Prior Knowledge *The knowledge/skills mastered earlier in the year foundational to the mastery of the required Standard in the current sample.*	Students will need to have knowledge of place value, ability to read and write decimals in standard, expanded, and word form. Students will also need to be familiar with decimals and decimal points, being able to compare decimals as well as order whole numbers and decimals. Students will need to be familiar with properties utilized in multiplication/division.		
Alignment to Program of Instruction *Briefly outline methods of instruction found in this sequence of lessons that align to the Program of Instruction described in A.3.*	Current school programming supports peer reviewed research based interventions and strategies by way of Applied Behavioral Analysis (ABA), Discrete trial Therapy(DTT) , and the use of Pivotal Response Therapies.		
Standard Number and Description *List the Number* and full description for the required Standard.*	5.NBT.7. Perform operations with multi-digit whole numbers and with decimals to hundredths. Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.		
Summative Assessment *Describe a cumulative and comprehensive activity, clearly separate from instruction and guided or independent practice, which allows each student to individually demonstrate mastery of the required Standard. A copy of the summative assessment must be attached to the curriculum sample.*	The Summative Assessment will measure the students' ability to address addition/subtraction, multiplication and division of decimals. Students will be asked to identify place value, complete various computations, round decimals, identify properties, and model decimals in a grid.		
Scoring Scale and Mastery Level *Explain how the assessment is scored, to include points per question, how points are awarded, total points possible, criteria necessary to demonstrate mastery, and grading scale. A copy of the answer key and scoring rubric (whichever applicable) must be attached to the curriculum sample.*	The assessment has 15 questions and is worth 20 points. Eleven problems will be worth 1 point and three word problems will be worth 3 points each for a total of 20 points. 16 to 20 points or 80% or above will demonstrate Mastery. 14-15 points or 70% - 79% will demonstrate Proficiency and will be a passing grade. Students receiving below 13 points and below 70% will not receive a passing grade. In letter grades, the scale will be the following: 18-20 pts = A, 16-17 pts = B, 14-15 pts = C, 12-13 pts = D, Below 12 pts F.		
Materials/Resources Needed	Board, ten-frames, Pre- Assessment Sheets, Math Journals, Homework-skill Sheets, Counting Cubes.		

Lesson (add as needed)	**Instruction**	**Student Activities**
1	The teacher will begin the unit talking about how much in daily life we utilize addition and subtraction, multiplying and dividing decimals. The teacher will have students help brainstorm in whole group- ways in which we may see these operations.(i.e at the grocery story, buying many items, measuring, estimating). The teacher will pass out the pre-assessment in order to gauge student understanding of base concepts needed for the unit. The pre-assessment will be comprised of 17 questions that look at ability to identify place value, rounding, as well as base addition, subtraction, multiplication and division problems. Each student is to come-up and conference with the teacher once they are done with their pre-assessment. This will allow the teacher to more accurately look at who is on-level, as well as who may need strategic, or intensive supports, as well as those who are beyond level. While students are waiting to conference with the teacher they will pick up their **Math Words Review Sheet** (10 problems) and begin completing the sheet with the correct review vocabulary words (greater than, Less than, equal to, etc.). Once the pre-assessments and pre-teacher conference have been completed the teacher will review the **Math Words Review Sheet** with the whole class.	Students will help brainstorm ways in which we see and use operations related to adding/subtraction, multiplication/division with decimals. Students will complete the pre-assessment independently, and then when completed raise their hand to denote that they are ready to have their one-on-one conference with the teacher to go over their pre-assessment. If a student is waiting to conference with the teacher or has already completed their conference with the teacher, they will pick up a **Math Words Review** Sheet located at the class work table, and complete that independently at their desk. Once all conferences are completed and all students have completed the math review words sheet, students will participate in whole group review of the **Math Words Review** for the unit by sharing their answers and making corrections for those problems that they may have missed.
2	The teacher will begin by having students pull out their math Journals to take down notes. As she guides the class in examples of properties that are associated with decimals. The teacher will	Students will need to pull out their math journals and take notes as the teacher leads them in properties associated with decimals. Students will then have the opportunity to practice building

	put 8 specific vocabulary or operational concepts on the board and will write a model of each. Students are to help decide which concept/rule or vocabulary concept is being demonstrated (i.e. teacher writes: *(20.5 + 35.06) + 66= 20.5+ (35.06+ 66), this would be Associative Property of Addition*. Once complete with vocabulary and operations and concepts review, the teacher will pass out base ten blocks and begin discussing how we can look at decimals with the base ten blocks. The teacher will write the example of $1.50 explaining that it represents the amount that they pay for lunch. She will pull a model of the $1.50 represented with base ten blocks on the board. Pulling a full hundreds block and 3 blocks of ten. She will drag the blocks into a ten-frame on the board to demonstrate the concept. Making sure to demonstrate the correct verbiage used as well, one and five tenths. The teacher will then explain that the class may decide to buy a drink for their lunch and it cost 50 cents. But with the decimal we would say. Five tenths. The teacher will then demonstrate five tenths into to the ten-frame on the board. The teacher will explain that now that we have the model we need to be able to look at how these numbers add up, or line up. Explaining that when we add and subtract decimals we are looking at lining the decimals up in order to complete the operation. (Teacher will also go over lining up decimals when the amount of numerals in the problem differs or one set of numbers is not in decimal form but just a whole number-we add zeros). The teacher will demonstrate this. $1.50 ___.50_ the teacher will then demonstrate the process in adding and then the inverse of subtracting the problem. The teacher will complete four more examples of building the	decimals with base ten blocks. While the teacher leads them in the board examples. Students will then complete two problems that the teacher has placed on the board and turn them in. After that, students will need to record their homework for that night.

	model with the base ten-blocks and then creating the addition and the subtraction problem. Once done completing the four examples, the teacher will write one addition and subtraction problem that students are to complete and turn in at the end of the period. Then students are to write down their homework for the night. **Homework:** *Practice It*- Students will draw models of base ten-blocks in a ten-frame table for various addition and subtraction problems (8 problems total). *This particular lesson with addition and subtraction of decimals will run 4 days with various center based, hands-on activities.*	
3	Students will complete a mid-unit concept quiz check. This will cover addition and subtraction of decimals, along with adding and subtracting decimals using models. Once complete with the quiz the teacher will go into instruction. The teacher will explain that the students have gone over how to add and subtract decimals, and now they will look at multiplying and dividing with decimals. The teacher will have students pull out their math Journals. The teacher will explain that the Commutative and Associative Properties of multiplication can be used to multiply numbers mentally. The teacher will also note that when multiplying decimals we multiply them as whole numbers, and add the decimal point based on the places after the decimal point in the problem. (ex: 0.23 x 7.5 here we set up the problem just as we would regular whole numbers 0.23 We multiply as we would with x7.5 regular whole numbers, when we get to our answer we will look	Students will complete a mid-unit quiz, and turn it in for review. Students will pull out their math Journals, to take down notes and write the examples related to multiplying decimals. Students will help in completing the sample problems that the teacher presents on the board. Afterward, the teacher will pass out independent practice skill sheets that students will work on. Once everyone has completed their sheet, students will have a chance to go over the answers and concepts with the teacher as a whole group. Students will be asked to volunteer answers and explain how they got their answers. After reviewing the concepts, the teacher will assign the homework for the night.

	at the places after the decimal in each number in the problem and count that many places in our answer to the left and then place our decimal. In this case the answer would be 1.725-one and seven hundred twenty-fifths. The teacher will draw the model for the problem and review how to use models to multiply as well. The teacher will provide four more examples that will be on the board. The teacher will call students up to help complete the problems. Students will then be given their skill sheet to complete 5 problems independently. The class will review answers together once all students are done, the teacher will have students come up and volunteer to complete problems on the board. Students will then be assigned their homework. **Homework:** *Using models to multiply and Multiplication properties.* *This part of the unit on multiplying decimals is 3 days' worth instruction as well as other center based activities.*	
4	In looking at divisions of decimals the teacher will explain that at times it is best to address the problem by rounding the decimals in the problem to estimate the quotient. The teacher will demonstrate an example of rounding the numbers in the division problem. 42.3/ 7= Here 42.3 can be rounded to 42, and now the problem looks like 42/7, which is 6. If we look at the original problem the full answer is 6.04. When looking at dividing decimals it is important to set the problem up like a regular division problem, then move the decimal In the dividend straight up in the problem where the quotient goes, now you can divide just as you would with whole	Students will pull out their math journals and follow in the direct instruction and examples that the teacher demonstrates on the board as it relates to completing division with decimals. Random students will be called up to complete dividing decimals starting with base ten models. Once whole group activities are completed, the teacher will pass out decimal ten-frame model sheets, where students will work independently completing mixed division problems as well as dividing decimals by using models. Afterwards students will break- up into various activities, pre-determined by the teacher based on level of understanding of

	numbers. The teacher will demonstrate this concept, and then draw the model for the problem and the answer. The teacher will present four more examples starting with base-ten models on the board then showing how students can find the answer. The teacher will have students come up and participate in completing the problems on the board. Once done with whole group instruction the teacher will hand out independent practice sheet of 8 problems that represent dividing decimals as well as dividing decimals by using models. *Those that need intervention supports will complete tasks paraprofessionals breaking down the concepts into steps.* **Homework:** *Dividing Decimals/ using models to Divide* *This part of the unit will run 3 days with various activities and center based activities.*	concepts. Some students will complete intervention tasks, while others will participate in selected enrichment tasks.
5	Today, the teacher has prepared a whole group review of addition, subtraction, multiplication and division properties and concepts of decimals. Students will participate in a Jeopardy style review game in which students are in teams of 5 and will have a chance to answer related questions. The first team to reach 10 points will when the game. *This will be a two day review and intervention support activity for students, prior to taking their final assessment.*	Students will participate in jeopardy style game. Students will work in teams of 5 to answer various questions that relate to adding /subtraction, multiplication/division of decimals and related concepts.

Name:_____ Date: _____

5th Grade Math Assessment 5.NBT.7

Round each decimal to the nearest one, then add or subtract.

1. 5.3 + 3.6 = _____
2. 18.7 – 12.2 = _____

Round each decimal to the place indicated.

3. 35.62; tenths _____
4. 89.21769; hundredths _____

Solve

5. Thomas wants to buy a pair of shoes that cost $68.29. He has $12.26 and receives $ 43.15 from his uncle for doing yard work. Will he have enough money to purchase the shoes? Explain your reasoning by showing your work.

_____

Add or Subtract

6. 341.68 + 104.34 = _____
7. 105.3 – 32 = _____

Identify the property

8. (12.4 +2.3) +20 = 12.4 + (2.3 +20)_____

Multiply.

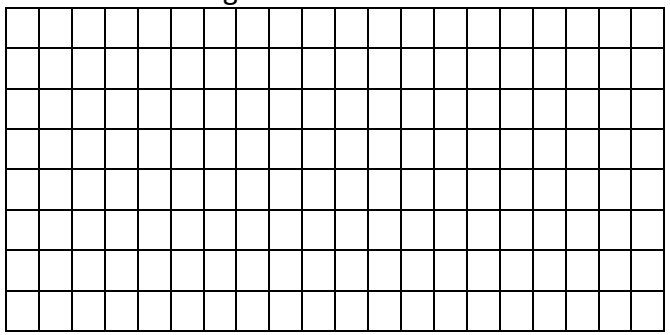
9. 0.12 x 0.83 = _____
10. 5.25 x 4.2 = _____

Divide.

11. $0.3\overline{)0.84}$ = _____

12. $3\overline{)\$24.21}$ = _____

13. Use the grid to model 1.2 + 0.7



Read each question carefully and write your answer on the line. Explain your reasoning by showing your work.

14. Sara spent $54.75 on 4 concert tickets how much did she spend on one ticket?

_____

15. A lawn is 57.3 ft. by 62 ft. find the area of the lawn space. A= Lx W

_____

Name:_____ Date: _____

5th Grade Math Assessment 5.NBT.7

Round each decimal to the nearest one, then add or subtract.

1. 5.3 + 3.6 = __9____(1pt)
2. 18.7 – 12.2 = __7____(1pt)

Round each decimal to the place indicated

3. 35.62; tenths _____35.6____ (1 pt)
4. 89.01769; hundredths __89.02_____ (1pt)

Solve

5. Thomas wants to buy a pair of shoes that cost $68.29. He has $12.26 and receives $ 43.15 from his uncle for doing yard work. Will he have enough money to purchase the shoes? Explain your reasoning by showing your work.

___No, he will only have $55.41____ (3pts)

Add or Subtract

6. 341.68 + 104.34 = _446.02___ (1pt)
7. 105.3 – 32 = ___73.3_____ (1pt)

Identify the property

8.(12.4 +2.3) +20 = 12.4 + (2.3 +20)_ Associative Property (1pt)

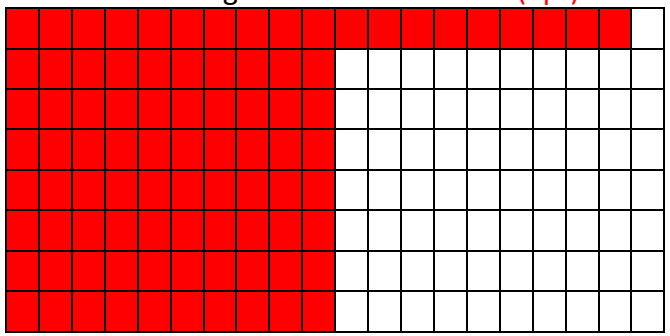
Multiply.

9. 0.12 x 0.83 = _____0.0996___ (1pt)
10. 5.25 x 4.2 = ____22.05____ (1pt)

Divide.

11. $0.3\overline{)0.84}$ = ___2.8_____ (1pt)
12. $3\overline{)\$24.21}$ = ___8.07_____ (1pt)

13. Use the grid to model 1.2 + 0.7(1pt)



Read each question carefully and write your answer on the line. Explain your reasoning by showing your work.

14. Sara spent $54.75 on 3 concert tickets. How much did she spend on one ticket?

_____$18.25_____ (3pts)

15. A lawn is 57.3 ft by 62 ft. find the area of the lawn space. A= Lx W

_____3552.6 ft_____ (3pts)

Grading Scale: 18-20 pts **A**
16-17 pts **B** **16-20 pts = Mastery**
14-15 pts **C**
12-13 pts **D**
Less than 12 **F**