Curriculum Sample Template
Max. 8 Pages

Grade Level	Fifth Grade	**Content Area**	Math
Course Title (grades 9-12 Only)	n/a		
Length of Unit	9 days (Assessment on day 10)	**Time of Year**	November
Expected Prior Knowledge *The knowledge/skills mastered earlier in the year foundational to the mastery of the required Standard in the current sample.*	Prior to this unit, students will have needed to master the concepts of place value with whole numbers as well as adding, subtracting, multiplying, and dividing whole numbers and decimals and place value to 100ths. They will understand the relationship between decimals and fractions (i.e. 0.1=1/10), be able to model decimals on a decimal square and on a place value chart to hundredths.		
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.*	This lesson follows the I Do/We Do/You Do gradual release model that Vista College Prep teachers will be expected to uphold in lesson planning and delivery. This unit takes advantage of the "think-pair-share" a strategy used by teachers to check for understanding. Throughout the lesson, as discussed in Vista College Prep's Program of Instruction, teachers are taking advantage of the smaller class size and targeting their instruction through individualization and working with smaller groups during the "you do" portion of the lesson.		
Standard Number and Description *List the Number* and full description for the required Standard.*	**5.NBT.7:** 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.*	Students will solve and explain the reasoning behind ten arithmetic problems dealing with adding, subtracting, multiplying, and dividing decimals.		
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 ten questions will be scored on an absolute scale with an answer key provided. Answers will only be counted correct if they completely match the answer key and no partial credit will be given. Students must receive 8 out of 10 on the assessment to master the standard.		
Materials/Resources Needed	Math notebook, pencils, base ten blocks, decimal squares		

* ***Standard Number****: For English Language Arts (Reading and Writing), use Grade, Strand, Standard (e.g., 3.RI.2). For K-8 Math, use Grade, Domain, Standard (e.g., 6.EE.7). For HS Math, use Conceptual Category-Domain, Standard (e.g., A-REI.6). For Science, use Grade, Strand, Concept, PO (e.g., 4.1.3.1).*

Lesson (add as needed)	Instruction	Student Activities
1	**Objective: Students will be able to (SWBAT) add and subtract decimals using base-ten blocks**. **Mini-Lesson**: Teacher introduces lesson (I Do). The teacher models using base-ten blocks to add and subtract decimals making the following points: We will use flats to model ones, longs to model tenths, and small cubes to model hundredths. You may need to regroup during decimal addition when the sum of any place value is 10 or more. You may need to regroup during decimal subtraction whenever the value of the digit being subtracted is greater than the value of the digit you are subtracting. **Guided Practice** (We Do)**:** Teacher models how students will practice with their partner. Teacher leads student partners to add and subtract decimals using base-ten blocks. After manipulating the blocks, student pairs draw quick pictures of what they did with the blocks in their math notebooks, making sure to note any regrouping that needed to be done. Student partners then explain their reasoning to one another as the teacher circulates to check for understanding. **Independent Practice** (You Do)**:** Students work independently on 2 more problems using the base-ten blocks and quick pictures to record their answers. The teacher will circulate to check for understanding and assist students that need extra help	**Do Now**: Assess a skill from the day prior Students follow along with the teacher as they learn a new skill. Students are taking notes as necessary. Students get into pairs and work with the teacher's support to add and subtract decimals using base-ten blocks. Students start working independently on two additional problems. Students can raise their hand for support as needed. **Homework:** Students solve five problems in which they will add and subtract using quick pictures to record their answers and explain the reasoning used.
2	**Objective: SWBAT multiply a whole number times a decimal (to tenths place) using decimal squares.** **Mini-Lesson:** The teacher models (I Do) using decimal squares to model multiplication of a whole number times a decimal in the tenths place. S/he shows the students a decimal square while holding up a base 10 flat. S/he explains that a decimal grid represents one whole just as we used the flats in yesterday's lesson to represent one. Each row or column represents one tenth and each square represents one hundredth. The teacher then writes the problem 3 X 0.5 on the board. She then shades 5 tenths on each of the three squares. To complete the multiplication the teacher would model how to combine the three sections of .5 to get the product (1.5). The teacher	**Do Now:** Assess a skill from the day prior Students observe as teacher models the lesson. Students answer as the teacher asks questions and the students are taking notes.

	does another example on the board of 5x 0.7. **Guided Practice** (We Do)**:** Teacher leads student partners to multiply decimals using decimal squares. After shading the squares, student pairs draw quick pictures of what they did with the squares in their math notebooks. Student partners then explain their reasoning to one another as the teacher circulates to check for understanding. **Independent Practice** (I Do): Students work independently on 2 more problems using the decimal squares and quick pictures to record their answers. The teacher will circulate to check for understanding and assist students that need extra help.	Working with a partner and teacher intervention, students practice the skill. Teacher is monitoring each group and carefully checking for understanding. Students start working independently on two additional problems. Students can raise their hand for support as needed. **Homework**: Students solve five problems in which they multiply whole numbers and decimals (tenths place) by shading decimal squares and explain the reasoning used.
3	**Objective: SWBAT multiply a whole number times a decimal (to the hundredths place) using decimal squares.** **Mini-Lesson:** The teacher models (I Do) using decimal squares to model multiplication. She explains that yesterday they learned how to multiply a whole number by a decimal to the tenths place. Today they will learn to multiply by decimals in the hundredths place. The teacher then writes the problem 8 X 0.75 on the board. She then shades 75 hundredths on each of the 8 squares. To complete the multiplication the teacher would model how to combine the 8 sections of .75 to get the product (6) The teacher does another example on the board. **Guided Practice** (We Do)**:** Teacher leads student partners to multiply decimals using decimal squares. After shading the squares, student pairs draw quick pictures of what they did with the squares in their math notebooks. Student partners then explain their reasoning to one another as the teacher circulates to check for understanding. **Independent Practice** (I Do): Students work independently on 2 more problems using the decimal squares and quick pictures to record their answers. The teacher will circulate to check for understanding and assist students that need extra help.	Students observe as teacher models the lesson. Students answer as the teacher asks questions and the students are taking notes. Students start working independently on two additional problems. Students can raise their hand for support as needed. Working with a partner and teacher intervention, students practice the skill. Teacher is monitoring each group and carefully checking for understanding. **Homework**: Students solve five problems in which they multiply whole numbers and decimals (hundredths place) by shading decimal squares and explain the reasoning used.
4	**Objective: SWBAT multiply two decimals by shading decimal squares.** **Mini-Lesson:** The teacher models (I Do) using decimal squares to model multiplication of two decimals in the tenths place. One factor is shown by shading columns that represent tenths. The other factor is	**Do Now:** Assess a skill from the day prior Students observe as teacher models the lesson.

	shown by shading rows of the already shaded columns. For the problem 0.3 x 0.4, 0.3 or 3 tenths is shown by shading 3 columns. Four tenths of 0.3 is shown by shading 4 rows, each representing 1 tenth of the 3 columns. To complete the multiplication the number of small squares that have been shaded twice is found by counting or multiplying the number of squares in the twice-shaded columns by the number of twice-shaded rows. The teacher does another example on the board. **Guided Practice** (We Do)**:** Teacher leads student partners to multiply decimals using decimal squares. After shading the squares, student pairs draw quick pictures of what they did with the squares in their math notebooks. Student partners then explain their reasoning to one another as the teacher circulates to check for understanding. **Independent Practice** (You Do): Students work independently on 2 more problems using the decimal squares and quick pictures to record their answers. The teacher will circulate to check for understanding and assist students that need extra help.	Students answer as the teacher asks questions and the students are taking notes. Working with a partner and teacher intervention, students practice the skill. Teacher is monitoring each group and carefully checking for understanding. Students start working independently on two additional problems. Students can raise their hand for support as needed. **Homework**: Students solve five problems in which they multiply decimals by shading decimal squares and explain the reasoning used.
5	**Objective: SWBAT divide a whole number by a decimal using concrete model.** **Mini-Lesson:** The teacher models (I Do) using base ten blocks and quick pictures to divide decimals by displaying the base-ten blocks. We will share blocks into equal groups, regrouping as needed. For example, when finding 4 divided by 0.5, we are finding how many groups of 0.5 are in 4. It is important to identify the dividend, the divisor, and the quotient in each model. The teacher does a real world example, modeling the process to the students and asking questions. *Leigh is making reusable shopping bags. She has 3 yards of fabric. She needs 0.5 yard of fabric for each bag. How many shopping bags can she make from the 3 yards of fabric?* **Guided Practice** (We Do)**:** Teacher leads student partners to divide decimals using base-ten blocks. After manipulating the blocks, student pairs draw quick pictures of what they did with the squares in their math notebooks. Student partners then explain their reasoning to one another as the teacher circulates to check for understanding. **Independent Practice** (I Do)**:** Students work independently on 2 more problems using the base-ten blocks and quick pictures to record their	**Do Now:** Assess a skill from the day prior Students observe the teacher modeling and teaching the new skill. Students will take notes as needed. Students respond as questions are asked. Students respond. Students work in partners under the guidance of the teacher to solve the problems and explain their reasoning. Teacher circulates to provide support as needed. Students start working independently on two additional problems. Students can raise their hand for support as needed. **Homework:** Students solve five problems in which they divide whole

	answers. The teacher will circulate to check for understanding and assist students that need extra help.	numbers by decimals and explain the reasoning used.
6	**Objective: SWBAT divide decimals and mixed numbers by a whole number using concrete models.** **Mini-Lesson:** The teacher writes the problem 0.6/3 on the board. S/he explains that yesterday we learned how to divide a whole number by a decimal. Today we will learn how to divide a decimal by a whole number. The teacher shows a model of 0.6 on a decimal square and explains that the problem is asking you to divide 0.6 into three equal groups. The teacher does an example, modeling the process to the students and asking questions. **Guided Practice** (We Do)**:** Teacher leads student partners to answer real world problems by multiplying and dividing. The students use diagram boxes to help find their answer. Student partners then explain their reasoning to one another as the teacher circulates to check for understanding. **Independent Practice** (I do): Students work independently on 2 more problems using decimal squares and explaining their steps. The teacher will circulate to check for understanding and assist students that need extra help.	**Do Now:** Assess a skill from the day prior Students observe the teacher modeling and teaching the new skill. Students will take notes as needed. Students respond as questions are asked. Students respond. Students work in partners under the guidance of the teacher to solve the problems and explain their reasoning. Teacher circulates to provide support as needed. Students start working independently on two additional problems. Students can raise their hand for support as needed. **Homework:** Students solve five problems dividing decimals and mixed numbers by whole numbers.
7	**Objective: SWBAT solve division problems with decimals in the divisor and dividend using concrete and pictorial models.** **Mini-Lesson:** The teacher explains that students will build on what they have already learned about division with decimals to solve problems with decimals in both the dividend and the divisor. The teacher reviews (I Do) using base ten blocks and quick pictures to divide decimals by displaying the base-ten blocks. The teacher writes the problem 4.8/1.2 on the board. She models with the base ten blocks how to divide 4.8 into 1.2 equal groups to come up with the quotient of 4. **Guided Practice** (We Do)**:** Teacher leads student partners to divide decimals using base-ten blocks. After manipulating the blocks, student pairs draw quick pictures of what they did with the squares in their math notebooks. Student partners then explain their reasoning to one another as the teacher circulates to check for understanding.	**Do Now:** Assess a skill from the day prior Students observe the teacher modeling and teaching the new skill. Students will take notes as needed. Students respond as questions are asked. Students respond. Students work in partners under the guidance of the teacher to solve the problems and explain their reasoning. Teacher circulates to provide support as needed. Students start working independently on two additional problems.

	Independent Practice (You Do)**:** Students work independently on 2 more problems using the base-ten blocks and quick pictures to record their answers. The teacher will circulate to check for understanding and assist students that need extra help.	Students can raise their hand for support as needed. **Homework:** Students solve five problems with decimals in the divisor and dividend.
8	**SWBAT solve division problems with decimals (hundredths) in the dividend and divisor using base ten blocks.** **Mini-Lesson:** The writes the problem 0.3/0.06 on the board. Teacher shows a model of three longs to represent 0.3 and 6 cubes to represent o.06. She then models how she will replace the 3 longs with 30 cubes because 0.3 is equivalent to 30 hundredths. She will then demonstrate how she divides the 30 hundredths into groups of 0.06. She will demonstrate how she finds that there are 5 groups of 0.06 in 0.3. **Guided Practice** (We Do)**:** Teacher leads student partners to divide decimals using base-ten blocks. After manipulating the blocks, student pairs draw quick pictures of what they did with the squares in their math notebooks. Student partners then explain their reasoning to one another as the teacher circulates to check for understanding. **Independent Practice** (You Do)**:** Students work independently on 2 more problems using the base-ten blocks and quick pictures to record their answers. The teacher will circulate to check for understanding and assist students that need extra help.	**Do Now:** Assess a skill from the day prior Students observe the teacher modeling and teaching the new skill. Students will take notes as needed. Students respond as questions are asked. Students respond. Students work in partners under the guidance of the teacher to solve the problems and explain their reasoning. Teacher circulates to provide support as needed. Students start working independently on two additional problems. Students can raise their hand for support as needed. **Homework:** Students solve five problems with decimals (hundredths) in the divisor and dividend.
9	**Objective: SWBAT solve real world problems by adding, subtracting, multiplying and dividing decimals.** **Mini-Lesson:** Teacher models using diagrams to solve two-step problems involving multiplication and addition as well as division. The boxes in the diagrams to solve these problems will be different sizes to represent different money amounts. The teacher does an example, modeling the process to the students and asking questions. *A group of friends go to a local fair. Jayson spends $3.75. Maya spends three times as much as Jayson. Tia spends $5.25 more than Maya. How much does Tia spend?* **Guided Practice** (We Do)**:** Teacher leads student partners to answer real world problems by multiplying and dividing. The students use diagram boxes to help find their answer. Student partners then explain	**Do Now:** Assess a skill from the day prior Students observe the teacher modeling and teaching the new skill. Students will take notes as needed. Students respond as questions are asked. Students respond. Students work in partners under the guidance of the teacher to solve the problems and explain their reasoning. Teacher circulates to provide

	their reasoning to one another as the teacher circulates to check for understanding. **Independent Practice** (I do): Students work independently on 2 more problems using the diagram boxes and explaining their steps. The teacher will circulate to check for understanding and assist students that need extra help.	support as needed. Students start working independently on two additional problems. Students can raise their hand for support as needed. **Homework:** Students complete a worksheet reviewing addition, subtraction, multiplication and division of decimals and study for assessment.
10	**Assessment: SWBAT 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.** Teacher will provide the assessment	Students complete unit assessment. **Homework:** Students will design their own real world problem and solve by adding, subtracting, multiplying, and dividing decimals.

Paste Summative Assessment Here: [this would be on a clean and separate piece of paper if administered to students]

Unit Summative Assessment:
Name: _____ Date: _____

1) $32.64 + $18.78

2) 10.05-6.38=

3) 1.54+1.73=

4) 9 x 2.35=

5) 0.09 x 0.7=

6) 38.4x 5.5=

7) 12.7 divided by 5

8) 8.33 divided by 0.34

9) A river otter eats about 0.15 times its weight in food each day. At the Baytown Zoo, the male river otter weighs 5 pounds. About how much food will the otter at the zoo consume each day? Explain your reasoning.

10) Percy buys tomatoes that cost $0.80 per pound. He pays $2.03 for the tomatoes. How many pounds of tomatoes does he buy? Show your work using words, pictures, or numbers. In words, explain how you know your answer is reasonable.

Paste Answer Key/Scoring Rubric Here:

1) $32.64 + $18.78 **= $51.42**
2) 10.05-6.38 **= 3.67**
3) 1.54+1.73 **3.27.**
4) 9 x 2.35 **= 21.15**
5) 0.09 x 0.7 **= 0.00063**
6) 38.4 x 5.5 = **211.2 minutes**
7) 12.7 divided by 5 **= 2.54**
8) 8.33 divided by 0.34 **= 24.5**
9) A river otter eats about 0.15 times its weight in food each day. At the Baytown Zoo, the male river otter weighs 5 pounds. About how much food will the otter at the zoo consume each day? **The river otter will consume about 0.75 pounds of food each day. I multiply 5 pounds and 0.15 by multiplying the hundredths by 5, the tenths by 5, and then adding the partial products.**
10) Percy buys tomatoes that cost $0.80 per pound. He pays $2.03 for the tomatoes. How many pounds of tomatoes does he buy? Show your work using words, pictures, or numbers. In words, explain how you know your answer is reasonable. **3.5 pounds. I can estimate using compatible numbers: 20 tenths divided by 5 tenths = 4 tenths. 3.5 is close to 4 so my answer is reasonable.**

The ten questions will be scored on an absolute scale with an answer key provided. Answers will only be counted correct if they completely match the answer key and no partial credit will be given. Students must receive 8 out of 10 on the assessment to master the standard.