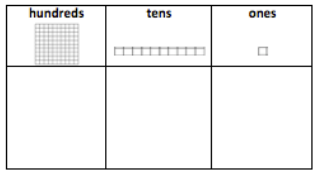
Curriculum Sample Template

Max. 8 Pages

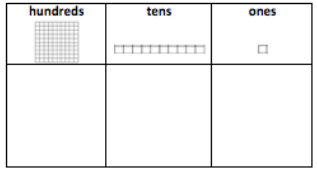
Grade Level	First Grade	**Content Area**	Math
Course Title (grades 9-12 Only)	n/a		
Length of Unit	4 Days (Assessment on Day 5)	**Time of Year**	January
Expected Prior Knowledge *The knowledge/skills mastered earlier in the year foundational to the mastery of the required Standard in the current sample.*	By January, Vista College Prep first graders will understand how to represent numbers as groups of ten, be familiar with place value (and all vocabulary i.e. digits, tens, ones), have been exposed to the word multiple, know how to count from 10-90 (skip counting by 10s), and have been exposed to using the place value mat.		
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.*	Vista College Prep teachers will engage in choral responses (asking students to chant counting by 10s from 10-90), "turn and talk" to a partner, frequent and systematic checks for understanding (in the lessons teachers will turn in, and there will be a designated spot asking teachers how they will check for understanding). Each math lesson below starts with the chant of skip counting by 10s, focusing on the basic fact knowledge that students need to be successful in this unit.		
Standard Number and Description *List the Number* and full description for the required Standard.*	**1.NBT.6:** Subtract multiples of 10 in the range 10–90 from multiples of 10 in the range 10–90 (positive or zero differences), 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 be able to subtract multiples of 10 in the range 10–90 from multiples of 10 in the range 10–90. Students will complete the problem, show their work through a place value chart, and fill in a sentence that explains the number of tens and ones in the answer.		
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.*	Students will need to receive a score of 20 out of 24 to demonstrate mastery on this standard. Each problem is worth three points, with a separate point for the correct answer, correct place value chart, and correct identification of the number of tens and ones in the answer.		

Materials/Resources Needed	Rubber bands, straws, and other manipulatives included in the enVision math curriculum (base ten blocks), hundreds chart, worksheets for each lesson, homework aligned to each standard, and place value mats

* ***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**[1]	**Student Activities**
1	**Objective: Students will be able to make groups of ten using manipulatives** **Objective: Students will be able to explain the value of each digit in a two digit number.** **Do Now:** Assess skill learned from the day before **Opening:** Teacher explains that students are going to review place value to prepare for lessons later in the week where they will be subtracting. Teacher asks students to count to from 10-90, counting by tens. Teacher reminds students that they can look at the number line or the number charter to help them if they forget. Teacher also reminds students of the definition of a multiple of ten. **I do or I/We:** Teacher reviews vocabulary of digit, multiple, value, ones place and tens place and provides examples through an explanation of where the ones and tens place is located. Teacher uses set of manipulatives to group tens.  **We do:** Teacher passes out manipulatives of rubber bands, straws, and place value mats. Teacher places numbers on the board (i.e. 30, 60, 90, 10) and students group tens as necessary. Teacher is providing support as needed. Key questions that are asked: *How many digits in this number? Which number is in the ones place? Which digit is in the tens place? How many groups of ten?* **You do:** Teacher places multiple numbers on the board and asks	Students are seated at their desks, a do now is passed out by their teacher and they know to immediately get started. If they finish early, students turn the do now over and practice writing out their 10s. All students lead a choral counting of tens (10-90) Students listen to the review of vocabulary words. Students wait quietly for the instruction to open their set up manipulatives and begin grouping as each number is put on the board. As the teacher cold calls or asks questions of students, students respond as they are called on. Students complete their independent work quietly, raising their hand for

[1] These lessons were created and adapted from resources and lessons found on BetterLesson.com

	students to create the number using their manipulatives. After the numbers are created students are instructed to record the number of tens and ones they found on their independent practice sheet.	help as needed. Homework: Identifying place value.
2	**Objective: Students will be able to subtract multiples of 10 from multiples of ten using a place value chart.** **Do Now:** Assess skill learned from the day before **Opening:** Teacher leads class in counting by tens. Teacher reminds students that they have been working with place value and today they are going to practice subtracting multiples of tens (what they just counted) from each other using a place value chart. **I do or I/We:** Teacher tells students that they are going to look at subtracting multiples of ten from multiples of ten. Teacher reminds students of vocabulary on math word wall (multiples, place value). Teacher writes the first problem on the board. 20-10 = _____. Teacher asks the students, *Which numbers are multiples of ten?* and *How do you know?* Great. Teacher tells students they are now going to set-up the problem and reminds students that they have already been working with place value. Teacher tells students that we have two tens and zero ones. Teacher puts two base ten blocks on the tens chart. Asks students to check for understanding, *Why don't I put anything in the ones column?* Then teacher says we have come to the subtraction sign. Teacher reminds students that subtraction means that we are going to take away. Teacher reminds students that we are taking away a part of 20 which is 10. *How many tens are in the number 10*? Teacher asks a student to come up and help remove one base ten block. Teacher reminds students that when we take away we are physically going to remove them from the mat. *Do we need to do anything with the ones*? Great. Teacher then asks students to count how many is left. Teacher writes full problem of 20-10= 10. Teacher goes through another example with 30-20=_____.  **We do**: Teacher now asks students to take out their base ten blocks and place value mat to do several problems together, for example:	Students are seated at their desks, a do now is passed out by their teacher and they know to immediately get started. If they finish early, students turn the do now over and practice writing out their 10s. All students lead a choral counting of tens (10-90) Students listen as vocabulary is being reviewed. Students respond to all questions during introduction to the lesson. One student comes to the front of the class to help teacher model the lesson. Students respond to all questions when called on (sometimes students are cold called). Students take out base ten blocks and place value mat to do several problems together.

	70-20=_____ 40-30=_____ 90-70=_____ **You do:** Students have a worksheet in front of them with 10 problems. Teacher instructs students to first place the total (first number) on the mat, then take away the number being subtracted, and then write out the answer. Teacher models all expectations first and then teacher walks around to conference with students.	Homework: Students solve subtraction problems with base ten blocks printed on their papers.
3	**Objective: Students will be able to subtract multiples of ten from multiples of ten using the hundreds chart.** **Do Now**: Assess skill learned from the day before **Opening:** Teacher explains to students that they have been practicing with place value and today they are going to learn how to subtract using the hundreds chart to help. Teacher asks students to count to from 10-90, counting by tens. Teacher reminds students that they can look at the number line or the number chart to help them if they forget. **I do or I/We:** Teacher puts the first problem on the board. Tells students we are going to use the number chart first. 60-40=___ Teacher asks students where they start. Students respond and teacher puts finger on 60. Teacher reminds students that when we are subtracting we are moving up the far right column. Teacher starts at 60 and says since we know there are 4 tens in 40, teacher will take away 4 tens. Teacher ends on 20 and says I know there are two tens and zero ones in 20. The answer is 20. **We do:** The teacher does 2 more problems and starts asking students for help. The teacher double checks the work by counting ten spaces to show students that just moving up the chart is sufficient. After students identify the number of tens and ones that are left over, the teacher reminds students again, *What did you notice? You noticed that the ones place is always zero.* At the end of the practice, the teacher asks students, *So what did we just do to subtract multiples 10 from a multiple of ten?*	Students are seated at their desks, a do now is passed out by their teacher and they know to immediately get started. If they finish early, students turn the do now over and practice writing out their 10s. All students lead a choral counting of tens (10-90) Student responds and tells the teacher to put his/her finger on 60. Students follow along as the teacher demonstrates how to use the number chart when solving subtraction problems with multiples of 10.

	You do: Teacher tells students that today they are going to roll a die which will tell them how many tens you need to subtract from the number written on your sheet. First, they will record the number sentence on the piece of paper. For example, if the problem says 40 and then I roll a 3, 3 tens is the same as 30 so, I will record 40-30. Students can use the hundreds chart to help them solve. Students will also record how many tens and how many ones are left over. Teacher will model first and then ask students to work independently.	Students respond that we can subtract multiples 10 from a multiple of ten using a hundred chart and noticing how the tens digit changes. Students watch as the teacher models and then students begin work independently. Homework: Students solve subtraction problems with a hundreds chart.
4	**Objective: Students will be able to subtract multiples of 10 from multiples of ten, record and double check their work.** **Do Now:** Assess skill learned from the day before **Opening:** Teacher reminds students of their study of place value, grouping tens, and how easy it is to subtract multiples of 10 from multiples of ten using their strategies: we are only looking at the tens place and the ones place will always be the same: zero. **I do or I/We:** Teacher explains that s/he has a story for the class. Estefania has 60 cards. Then she gave 30 away. Teacher asks: 1. How can I find out how many cards Estefania has left? 2. How else can I use base ten blocks to find out how many cards Estefania has left? 3. How could you use skip counting as you take away a group of ten? 4. What did you notice about how the tens and ones digits changed? 5. How could I draw a picture to show how many cards Estefania has left? Teacher sets up the problem on the board 60-30 =_____ I have ____tens and _____ones left over.	Students are seated at their desk with a worksheet in front of them that has all of the problems that the teacher is going to do plus their independent work. 1. Student answer: You can use the number line and move down by ten. 2. Student answer: You can show 6 groups of 10 and 0 ones. Then you need to take away 3 groups of ten because 3 groups of 10 is the same as 30. This means he has 18 cards left. 3. Student answer: Each time you take away a ten it would be 10 less. 50, 40, 30. 4. Student answer: The tens digit **decreased** by 1 because you are taking away 3 tens. The ones digit stayed the same because you are not changing the ones. 5. Student Answer: You could draw 3 tens and 0 ones, and then cross out 3 tens because that is how many you have left.

	Excellent! So what did we just do to subtract a multiple of ten from a multiple of ten? Teacher asks final question of *How many tens and how many ones do I have left over?* Teacher reminds students that they can use the space provided on their worksheet to draw a tens/ones column. Teacher models how you can draw the column even when it is not prepared for you. Teacher says final rules in subtracting multiples of 10 from multiples of 10: 1) draw out a tens/ones column to cross out the number you are subtracting and 2) double check your work on the hundreds chart. Teacher tells students that they are going to do another example together: 30-20=_____. During each problem teacher asks students *How can I find out the difference?* Teacher asks students to turn and talk to their partner. Teacher asks, *What did you notice about how the tens and ones digit changed?* **We do:** Teacher tells students that they are going to do the same thing again with So now we are going to try a few more examples. I am going to put some number sentences on the board and you are going to use your connecting cubes or draw a picture to help you solve. #1: 60-50=_____ #2: 90-90=_____#3: 80-10=_____ Teacher always ends with *How many tens and how many ones do I have left over?* Teacher explains a tricky problem if there are no tens left over. **You do:** Teacher tells students that during independent practice, students will continue subtracting multiples of 10 from multiples of 10. Students will use the box below to create a tens and ones column. Teacher circulates around the room to monitor students at work. Teacher is looking for whether students able to determine the tens and ones in each number. At the end of the lesson teacher asks class *How can you subtract groups of ten from a multiple of ten?*	Student answer: You can subtract groups of ten from a two-digit number by noticing how the tens digit changes and skip counting backwards using a picture or base ten blocks. Students respond to final question. Students respond with ideas like: You can use your base ten blocks to show 30 by using 3 tens and 0 ones. Then you can take away 2 tens and skip count backwards by saying 20, 10. The answer would be 10. You could also draw a picture Student response: The tens digit decreased by 2 and then ones digit stayed the same.) Teacher and students work through the problems together. Students remind teacher of the two rules (draw and then double check). Students respond to how many tens and ones are left, understanding that there will always be a zero in the ones place. Students complete worksheet, creating a tens and ones column to cross out the number of tens that are being subtracting. Then students double check their work on the hundreds chart and write out how many tens and ones are left over. Class responds: You can subtract multiples of ten from multiples of ten by noticing how the tens digit changes and skip counting backwards by drawing base ten blocks and double checking on the number chart. Homework: Students solve subtraction problems by drawing base ten blocks and double checking their work with a hundreds chart.

5	**Assessment: Subtract multiples of 10 in the range 10–90 from multiples of 10 in the range 10–90 (positive or zero differences), using concrete drawing, strategies based on place value, relate the strategy to a written method and explain the reasoning used.** Teacher gives students an assessment with 8 problems worth three points each. Students must show their work and write in the tens and ones that are left over after the problem is complete.	Students are seated at their desk, wait for the assessment to be passed out, and get started. If students finish early they can take out their independent reading book. Homework: Challenge - subtracting multiples of 10 from two-digit numbers.

Paste Summative Assessment Here (would be on a clean page if administering):

Name: _____ Date: _____

1. 70-40=

I have ____tens and ____ones left over.

4. 80-20=

I have ____tens and ____ones left over.

7. 90-20=

I have ____tens and ____ones left over.

2. 20-10=

I have ____tens and ____ones left over.

5. 80-30=

I have ____tens and ____ones left over.

8. 70-50=

I have ____tens and ____ones left over.

3. 30-20=

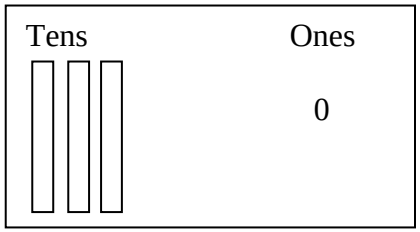
I have ____tens and ____ones left over.

6. 60-60=

I have ____tens and ____ones left over.

Paste Answer Key/Scoring Rubric Here:

1. 30 (I have 3 tens and 0 ones left over) _____/3



2. 10 (I have 1 ten and 0 ones left over) _____/3
3. 10 (I have 1 ten and 0 ones left over) _____/3
4. 60 (I have 6 tens and 0 ones left over) _____/3
5. 50 (I have 5 tens and 0 ones left over) _____/3
6. 0 (I have 0 tens and 0 ones left over) _____/3
7. 70 (I have 7 tens and 0 ones left over) _____/3
8. 20 (I have 2 tens and 0 ones left over) _____/3

Total _____/24*

*Each answer is worth three points: correct answer, correct drawing, and correct identification of tens and ones. Students are expected to show a drawing as demonstrated in answer key #1.