Curriculum Sample Template
Max. 8 Pages

Grade Level	First Grade	**Content Area**	Mathematics
Course Title (grades 9-12 Only)	N/A		
Length of Unit	4 days + 1 day for the summative assessment	Time of Year	4th Quarter
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 be able to: Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral. Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: a. 10 can be thought of as a bundle of ten ones — called a "ten." b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).		
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 unit aligns to the Core Knowledge Sequence for Math, to the sequence for Singapore Math, and to the sequence for Singapore Math, and to the 2010 AZ Math Standards. The domain of Numbers and Number Sense (CK) and Number and Operations in Base Ten (CCSS) will be taught at the 1st Grade level. The skill of subtracting multiples of 10 is revisited at increasingly higher levels of rigor as set forth in the ADE 2010 Mathematics Standards (CCSS), and in Core Knowledge and Singapore Math. The content knowledge of number and number sense is spiraled throughout the Core Knowledge Sequence from Kindergarten to 6th grade, and then further applied through Pre-Algebra and Algebra in 7th and 8th Grade. As described in the Program of Instruction, cooperative learning will take place throughout this unit. Each lesson includes a combination of teacher-led instruction, small group interaction, independent practice, and ongoing assessment. Prior to beginning instruction, the teacher will administer an aligned pre-test to assess student understanding, and use data from this to target individual students' needs throughout the unit. Students will individually graph their results on both the pre- and post-tests, and graph their results in an individual portfolio, which serves as a visual representation of their progress towards their "Big Goal" in Math.		
Standard Number and Description *List the Number* and full description for the required Standard.*	1. NBT. 6 Use place value understanding and properties of operations to add and subtract. 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*	At the end of this unit, students will be given a summative assessment which will consist of four parts. In each part, students will apply what they have learned about place value and properties of operations to add and subtract by		

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.	tens. There are a total of ten items and 20 points possible. Please see attached.
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.*	Each item will range between 1 to 3 points, for a total of 20 points. Items will be scored according to an answer key (see provided). Grading for the assessment will be based on the following scale: 0-12= Falls Far Below; 13-15=Approaching; 16-18= Meets; 19-20= Exceeds. According to our program of instruction, 80% will indicate mastery. Thus, a score of 16 to 20 points will indicate mastery of this standard.
Materials/Resources Needed	Base Ten Blocks, Advanced Organizer (sentence frame in a plastic sleeve), write and wipe 100's chats, dry erase marker with eraser for each student, extra paper for extension activities.

Lesson (add as needed)	**Instruction** **TW= Teacher will; SW = Student will; TPS= Think, Pair, Share; INM = Introduction to new material; CFU = Check for understanding; GP= Guided practice; IP = Independent practice**	**Student Activities**
1	**Activation of Prior Knowledge:** TW review the correlation between Base Ten Blocks and Number System/Place Value. TW place Base Ten Blocks on each table. TW create a KL t-chart. TW direct students to discuss what they know about the blocks for three minutes. TW notify students that a student from each table will report the discussion from their table. TW randomly choose one student from each table to report out to class. TW list known facts on the K side of the t-chart. TW discuss that the KL chart will be added to over the entirety of the current unit to reflect on building of knowledge. TW tell students at the end of today's lesson they will be adding to the L side of the T-chart. TW read the objective aloud to class. TW also discuss the end goal for the Unit. **Objective:** Students will demonstrate comprehension of place value related to adding groups of ten by describing how a number changes as groups of tens are added. **INM:** Key Points: 1. Numbers are organized by place value. 2. Tens and ones organize numbers according to the base ten number system. 3. Adding groups of tens changes the digit in the tens place only.	SW discuss with their table what they currently know about Base Ten Blocks for three minutes. SW listen and engage in the table conversation to prepare if called on to report out. SW report what their table knows regarding Base Ten Blocks. SW repeat the objective and ask and questions for clarification.

	Modeling: TW use a two digit number to demonstrate with Base Ten Blocks what the number looks like. TW verbally add a group of tens. TW demonstrate the addition of the tens by using tens from the Base Ten Blocks. TW emphasize the change that took place in the tens place. TW use the sentence frame to explain what changed with the number. TW state the correct sentence frame. TW repeat at least two times using various two digit numbers. More practice may be required based on the informal teacher observation of the student response when using the sentence frame with partners.	SW use the sentence frame: "There are _____ tens and _____ ones." SW will use this frame to label the given two digit number. SW repeat the change in the sentence frame when tens have been added. SW use the sentence frame to guide discussion on the change of the original number. SW show a thumbs up or down if they had the same sentence as the teacher stated.
	Guided Practice: TW distribute advanced organizers and dry erase supplies to each student. (Advanced organizers will be a document with the sentence frame typed on it leaving blanks for students to fill in. The organizer should be placed in a plastic sleeve for write and wipe use.) TW give the students a two digit number. TW direct students to complete the organizer just as they verbally completed the frame in the previous steps. TW circulate the classroom reviewing organizers to check for understanding and mastery of concept. TW verbally tell students how many tens to add to the current number. TW listen to students as they articulate reasoning behind the changes they made to their organizer.	SW use the Base Ten Blocks to represent the given number. SW complete the organizer to represent the given number. SW articulate reasoning behind numbers written and changed on organizer when given the tens to add to the original number.
	Independent Practice: TW direct students to complete page 139 in the 1B Workbook. TW check that students are able to decompose two digit numbers and then compose to formulate the answer. TW scaffold for the remediation group until they successfully complete the given activity. Remediation Group (RG)- TW scaffold completion of page 138 in workbook with group emphasizing on using pictures to reinforce addition of tens. Practice Group (PG)- TW direct students to complete page 138 independently. Once completed, students will compare answers with a partner and correct answers on page 139. TW observe students after finishing with remediation group. TW move students to the Extension Group with successful corrections of pages 138 and 139. Extension Group (EG)- TW direct students to create addition problems with tens including answers. They will exchange their problems with partners within the group. TW direct these students to assist others when they move from the other two groups. TW scaffold assistance given to others.	SW complete page 139 which will show knowledge and comprehension of adding groups of tens. SW work on differentiated activities based on mastery level of given workbook page. Students completing six to eight problems correctly will benefit from an extension group. Students who complete four or five problems will benefit from a practice group. Students who complete three or less correct answers will benefit from a remediation group. (RG)SW follow along and focus on pictorial representation of addition of tens. SW will move to Practice Group upon successful completion of page 138. (PG)SW complete page 138 independently and compare answers with a partner. SW correct answers on page 139 with partner. SW move to Extension Group with direction from teacher. (EG)SW write addition problems with answers to exchange with partners. They will apply understanding of adding groups of tens to a two

	Assessment: TW use the Independent Practice to informally assess all students to determine proficiency of the objective. **Closure:** TW gather students back to their original tables. TW initiate a discussion of key points learned during the lesson. TW ask a representative from each table to report two points learned to write on the L column of the t-chart.	digit number. SW assist other students when they move up to this group. SW discuss learned points as a group and report to teacher upon request. SW record learned points and one example in their math journals.
2	**Activation of Prior Knowledge:** TW review the KL chart from Day 1. TW focus on the L points. TW read the objective for the lesson. TW remind students they will revisit and add to the chart at the end of the lesson. **Objective:** Students will demonstrate comprehension of place value related to subtracting groups of tens by describing how a number changes as you subtract tens from a two digit number. **INM:** Key Points: 1. Adding tens increases digit in the tens place while subtracting groups of tens will decrease the digit. 2. When adding and subtracting tens students can use mental math facts to count tens as one group of ten ones. **Modeling:** TW use a two digit number, such as 24, and demonstrate with Base Ten Blocks what the number looks like. TW verbally subtract a group of tens. TW demonstrate subtraction of the tens by using tens from the Base Ten Blocks. TW emphasize the change that took place in the tens place. TW use the sentence frame to explain what changed with the number. TW state the correct sentence frame. TW repeat at least two times using various two digit numbers. More practice may be required based on the informal teacher observation of the student response when using the sentence frame with partners. **Guided Practice:** TW distribute advanced organizers and dry erase supplies to each student. TW give the students a two digit number, such as 46. TW circulate the classroom reviewing organizers to check for understanding and mastery of concept. TW verbally tell students how many tens to subtract from the current number, such as take away 2 tens which is the same as 20. TW listen for mastery through student articulation.	SW listen to review of learned points from Day 1. SW repeat the objective and ask and questions for clarification. SW use the sentence frame: "There are _____ tens and _____ ones." SW will use this frame to label the given two digit number. SW repeat the change in the sentence frame when tens have been subtracted. SW use the sentence frame to guide discussion on the change of the original number. SW show a thumbs up or down if they had the same sentence as the teacher states. SW use the Base Ten Blocks to represent the given number. SW complete the organizer to represent the given number. SW articulate reasoning behind numbers written and changed on organizer when given the tens to subtract from the original number.

	Independent Practice: TW direct students to complete page 149 in the 1B Workbook where students will decompose two digit numbers before composing to formulate an answer. TW check work as students are completed RG- TW scaffold completion of page 148 in workbook with group emphasizing on using pictures to reinforce subtraction of tens. PG- TW direct students to complete page 148 independently. Once completed, students will compare answers with a partner and correct answers on page 149. TW observe students after finishing with remediation group. TW move students to the Extension Group with successful corrections of pages 148 and 149. EG- TW direct students to create subtraction problems with tens including answers. They will exchange their problems with partners within the group. TW direct these students to assist others when they move from the other two groups. TW scaffold assistance given to others. **Assessment:** TW use the Independent Practice to informally assess all students to determine proficiency of the objective. **Closure:** TW gather students back into their original tables. TW initiate a discussion of key points learned during the lesson. TW ask a representative from each table to report two points learned to add to the L column of the t-chart.	SW complete page 149 which will show knowledge and comprehension of subtracting groups of tens. SW work on differentiated activities based on mastery level of given workbook page. Students who complete six to eight problems correctly will benefit from an extension group. Students who complete four or five problems will benefit from a practice group. Students who complete three or less correct answers will benefit from a remediation group. TW scaffold for the remediation group until they successfully complete the given activity. (RG)SW follow along and focus on pictorial representation of subtraction of tens. SW will move to Practice Group upon successful completion of page 148.(PG)SW complete page 148, by using pictures to subtract group(s) of tens, independently and compare answers with a partner. SW correct answers on page 149 with partner. SW move to Extension Group with direction from teacher. (EG)SW write subtraction problems with answers to exchange with partners. SW will apply understanding of subtracting groups of tens from a two digit number. SW assist other students when they move up to this group. SW discuss learned points as a group and report to teacher upon request. SW record learned points and one example in their math journals.
3	**Activation of Prior Knowledge:** TW review KL chart from Days 1 and 2. TW hand out 100's charts and ask students to discuss what they know about the chart. TW also prompt students to discuss how the chart relates to what has been learned in the past two days. TW read the objective to students. **Objective:** Students will demonstrate analysis of properties pertaining to adding and subtracting operations by distinguishing which direction to move on a 100's chart based on verbal cues. **INM:** Key Points: 1. The 100's chart is made up of ten rows and ten columns. 2. When adding using a 100's chart you move to the right to add ones and down to add tens. 3. When subtracting using a 100's chart you move to the left when subtracting ones and up when subtracting tens. **Modeling:** TW distribute 100's charts to each student with a dry erase	SW discuss with their table what they currently know about the 100's chart. SW listen and engage in the table conversation to prepare if called on to report out. SW report what their table knows regarding the chart. SW repeat the objective and ask and questions for clarification. SW follow along with teacher as the procedures are demonstrated. SW

	set. TW model where to begin on the 100's chart after given a two digit number as a starting point. TW verbally add or subtract groups of ten. TW show how to move from the starting point up or down rows depending on number. TW ask for group response when modeling multiple problems. TW ask "Do we move up or down and how many rows?"	participate in group response. SW explain why to move in a direction based on the operation.
	Guided Practice: TW give verbal cues to students. (ex. "Begin at 23 and add 10 or 20. What number are you on?") TW check for mastery by directing students to circle the answer and hold up 100's chart when prompted. TW repeat these procedures at least five times to check for understanding.	SW follow along and determine direction to move based on teacher's verbal cues. SW show teacher the answer when prompted. SW repeat procedure until mastery is met. SW articulate reasoning behind move.
	Independent Practice: TW pair up students and direct them to give each other verbal addition and subtraction problems giving groups of tens only. TW scaffold partners and give extra practice to partners or individuals unable to follow verbal cues. Students showing mastery will be challenged to determine answer without using the 100's chart as a resource.	SW work in pairs to formulate addition and subtraction problems using groups of tens only. SW use 100's chart to arrive at answer.. SW follow directions and apply knowledge of place value and operations to arrive at correct answer. SW discuss how they reached the answer
	Assessment: TW use the Independent Assessment to track student mastery of the objective. The teacher will remediate with extra practice for any student who does not show mastery.	SW engage in discussion of learned points. SW reflect on objective and application of given operations.
	Closure: TW refer class back to the KL chart sharing what they learned today. TW add to the KL chart from Days 1 and 2. TW ask students what are the similarities between the Base Ten Blocks and 100's chart.	SW take part in a discussion comparing Base Ten Blocks and 100's chart and how to use both to add or subtract by 10s .
4	**Activation of Prior Knowledge:** TW review the knowledge learned over the course of the unit. TW verbally review each concept leaving pauses for key concepts for the whole group to respond. (ex. "When we add o group of tens using a 100's chart we move _____ one row. The reason we do this is the digit in the _____ place increases by one.") TW review daily objective.	SW actively engage in review of concepts. SW respond with whole group response.
	Objective: Students will demonstrate application of number sense and properties of addition and subtraction operations to solve number sentences.	SW repeat objective and ask any questions for clarification.
	INM: Key Points: 1. Strategies used to add and subtract on the 100's chart can be applied to solve number sentences. 2. Addition and subtraction of tens can be solved using mental math strategies.	

	Modeling: TW write a number sentence on the board. TW orally state the steps to solve the given problem using mental math strategies. "When solving the problem 45+20 the number 20 is made up of 2 tens…I would add 2 tens to the 4 tens in 45…this would give me 6 tens…which is 60 and 5 ones….therefore 45+ 20 equals 65." TW explain that the strategies from Day 3 can also be applied to solve the problem. "If you can visualize 45 on the 100's chart you can visualize moving down two rows to 65." TW repeat these steps at least two more times using various addition and subtraction problems. More practice may be required based on informal teacher observation of student participation and responses.	SW follow along with mental math strategies modeled by the teacher. SW ask questions to clarify any misunderstanding or confusion.
	Guided Practice: TW give tables two problems to solve together as a team. Each student will be responsible for participating in problem solving. TW circulate classroom to ensure participation from all students. TW ask each table to share how they solved one of the two problems they were assigned.	SW work together to solve and discuss solutions to addition and subtraction problems using knowledge of place value and properties of operations. SW share how they solved one of the two problems assigned. SW listen to all groups share their answers.
	Independent Practice: TW give five addition and subtraction problems reinforcing adding and subtracting groups of tens. TW provide scaffolding and support as needed.	SW complete problems independently. Any student not showing mastery will be pulled into a small group for remediation.
	Assessment: TW use the Independent Practice to track student mastery of the objective. The teacher will remediate for any student who does not show mastery.	
	Closure: TW review all objectives and how they were met. TW add to the KL chart and restate all information on chart. TW ask students about their confidence and comfort with the concepts learned in the unit. TW ask students how they can apply the objectives met in this unit to other areas of math. (ie. money and time)	SW recall points learned throughout the unit. SW give examples of how they can apply these concepts to other mathematical situations.

First Grade Summative Assessment

Name: _____ ***Date :***_____

1. NBT. 6 Use place value understanding and properties of operations to add and subtract.
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.

Complete the addition and subtraction sentences below by using the pictures.

1. _____ + _____ = _____

2. _____ - _____ = _____

(6pts)

Complete the number sentences below.

3. 5 tens + 4 tens = _____ tens
   50 + 40 = _____

4. 3 tens - 1 ten = _____ tens
   30 - 10 = _____

(4pts)

Use the 100's chart to solve the question.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

5. Begin at 36 and add 20. Then add 10 more.
   What number are you on ? _____

6. Begin at 75 and subtract 10. Then subtract 30 more.
   What number are you on? _____

(2pts)

Complete the following number sentences. (8pts)

7. 55 + 20 = ____
8. 20 + 37 = ____
9. 75 – 30 = ____
10. 43 – 10 = ____

Answer Key/Scoring Rubric:

1. 20 + 30 = 50 (1pt for each number)
2. 20 – 10 = 10 (1pt for each number)
3. 9 ; 90 (1 pt for each answer)
4. 2 ; 20 (1 pt for each answer)
5. 66 (1 pt)
6. 35 (1 pt)
7. 7 (2 pts)
8. 57 (2 pts)
9. 45 (2 pts)
10. 33 (2 pts)

Score: _____/20 Grading Scale: 0-12= Falls Far Below; 13-15=Approaching; 16-18= Meets; 19-20= Exceeds