Grade Level	1st grade	**Content Area**	Math
Course Title (grades 9-12 Only)			
Length of Unit	9 days	**Time of Year**	2nd qtr
Expected Prior Knowledge *The knowledge/skills mastered earlier in the year foundational to the mastery of the required Standard in the current sample.*	Students Prior Knowledge should reflect skills and ability to demonstrate basic addition and subtraction of 10's (i.e. understand the symbols related to completing these actions(-,+). Students should already have understanding of regrouping when adding a one-digit number to a two-digit number. Understanding of groups of 10 and concept of "some".		
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.*	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 complete an assessment that looks at their ability to address the question "how can I subtract a two-digit number". Each question will reflect the concepts and skills gone over in the Unit on subtracting multiples in the range of 10-90, with the use of pictures/manipulative, and showing the number/written method or relationship. A copy of the summative assessment is provided below.		
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.*	There will be five questions on the assessment, three questions worth 2 points, one question worth 1 point and one question worth 3 points for a total of 10 points. Points will be given for answering correctly and illustrating with models when asked. Students earning 8 points or 80% will demonstrate Mastery. Grading Scale: 9-10 pts = A; 8 pts = B; 7 pts = C; 6 pts = D; Below 6 pts = F A copy of the answer key is provided below.		
Materials/Resources Needed	Number/Vocabulary Cards, Pencil/Paper, Vocabulary Test, Various Center Materials.		

Lesson (add as needed)	**Instruction**	**Student Activities**
1	Teacher will introduce concept of "How we can add and subtract two-digit numbers." Through review of previous vocabulary activity. Students will be asked what key terms are needs in completing such problems, and will be given vocabulary cards that demonstrate each of the three specific concepts being talked about. Students will be asked to cut apart and paste vocabulary words to correct visual demonstration of the concept. Teacher will present vocabulary words on the board to review. Teacher will present five regroup problems of two-digit to one digit. Through a fun story format, involving students in the class. Students are drawing a picture representation of the presented stories (ex: Jaime sees 13 cars at the race track that he went to this past weekend. Later he sees 4 more. How many cars would he have seen in all? Students will be asked to write the base number sentence under each picture demonstration. Then students will be asked to turn in the math sheet into the class work math tray.	Students will take their vocabulary cards and the visual representation cards and cut them apart and glue them into their math vocabulary journals. Students will then need to pull out a piece of paper and listen and look at the math stories being presented by the teacher on the board and draw a picture representation of the presented story. And write the corresponding numeral representation to complete the two-digit-one-digit problem. Students will turn their competed work into the complete class math tray.
2	Teacher will present vocabulary test paper to students and will read through each question.(1-5) (i.e. the answer to a subtraction problem is called the_____). Teacher will start with guiding students in board activity, where problems that represent two groups of 10's being added are	Students will complete vocabulary test that address: add, difference, ones, subtract, sum). Student will view and watch as teacher completes problems on the board detailing steps for looking at two-digit problems.

	presented (i.e 50+10). Teacher will guide students through decomposing the numbers first (ex: the number 50 is 5 groups of ten, The number 10 is 1 group of 10. The teacher will present 4 problems that represent the concept. The teacher will then put students into groups of three and give each group a set of number set cards (6-two for each student) that have two-digit addition problems on them. Students will be directed to talk in detail in their groups about how many groups of tens and ones each numbers set has. Teacher will walk throughout the classroom to monitor students and assess areas of need for students as well as correct descriptions of the process. The teacher will then have students go back to their seats and join in group instruction on drawing representations for the two-digit problems with the numerical sentence representation on place-value frames with ones and tens. Explaining that when we look at adding we add the ones then the tens, (50+10=60). The teacher will demonstrate the inverse with Subtraction as well. (This Lesson is a two-day activity.)	While the teacher presents problems, students will be called up to the board to carry out specific parts of completing the problems. By writing groups of tens as well as remaining numbers into the columns for ones. While in their group, each student is to detail verbally to the partners how each number is represented.(ex;43 is 4 groups of ten and then 3 ones.). The students are then back at their desks to complete drawing representations of two-digit problems with corresponding number sentences for addition and the inverse of subtraction. (This is a two day activity)
3	The teacher will explain that students will be going to math centers, to complete some specific tasks on building models to complete the addition and subtraction of numbers in multiples of 10 through 90. The teacher will have students break off into their pre-sorted center colors and have students go to their appropriate table. The teacher will instruct students that once they get to the math centers, the materials including manipulatives and number lines from which they will be completing problems will already be there	Students will rotate to their specific center by color. Student will go to math centers and work with prepared materials and math manipulatives. Students will be presented with a number problem (ex: 40+10, 70-.10). A place value mat will be provided in which students will need to create groups of tens to represent the problems with the sum. Each student will progress though 5 problems where they must build the corresponding models to represent the presented problem. Then students will complete 5 five problems in which

	and they will just need to build the models with the related written numerical strategy. Students will be instructed that they must complete 10 problems then write their problems on mats and turn them in to the class math tray. The teacher will model two problems on the board that are from the math centers that the students will be completing, prior to the students being sent to the math centers. The teacher will monitor student work and work with students who need assistance in completing the activity tasks, as well as need support in answering questions. This will allow the teacher to assess who is progressing with the presented concepts as well as who needs interventions.	they must complete the inverse operation of writing in the number sentence to an already presented visual model.(ex: student must write in 80-10=70, 50+20=70). Students will also have a 10's number line available to help with counting. Once the student has completed all of their problems they will take their finished work to the completed work tray.
4	Students will continue to work in math centers. The teacher will have students break off into their pre-sorted center colors and have students go to their appropriate table. The teacher will walk and model each center with the class. **Center#1**: Cut and paste color chips (yellow/red) to build models. **Center#2:**Place value mats- showing regrouping **Center#3**:problem Solving –with basic words problems **Center#4:** Subtracting and Adding 10"s with reasoning **Center #5:** Ponder the Question. Students will be told they will have two days to complete three centers. Once they complete the work in their centers they are to go back to their seat to complete their in-class math practice sheet on the presented concepts. (This will be a two day activity)	Students will rotate to their specific center by color. If at **Center #1**/The student is to take paper tiles red and yellow that are provided, cut and paste them onto the provided place-value sheet of tens and ones to build the appropriate number that is a presented on a number card.(ex: 30-10) student must complete 5 problems. **Center#2**/Student is to pull a place value mat that already has a specific number represented with pictures and circle in the ones column, the numbers that need to be regrouped, or the extras that are over 10. **Center#3**/Students are to complete word problems that require basic adding and subtracting of numbers (ex: John has 30 polished rocks. He is given 20 more by his grandpa. How many polished rocks does John have?). Student must complete 2 questions. **Center#4**/ Students are completing adding and subtracting multiples of 10 and writing the corresponding number sentence to match the presented picture model. **Center#5**/Students are to complete a written reasoning question. (ex: Why do we need to regroup?) Student must write answer on provided

		sheet. Once complete with centers, student does independent work at desk.
5	The teacher will have a review session with students on the strategies needed to complete adding and subtracting with multiples of 10. The teacher will divide the class into two teams for a class review game. There will be two students that get a chance to raise their hands to come up and solve a problem on the board -in turn earning points for their team. The first team to get to 10 points wins the game. Students in the team will be allowed to consult with team mates while one team mate is up at the board, if their team misses the answer the other team will get a chance to solve it, but if the other team fails in completing the answer correctly, the problem goes back to the original team. (This is for day 1 of Assessment) Day 2 of Assessing, students will be given the Summative Assessment.	**Day 1 of Assessment**-Student will join their assigned group, per teacher group assignments. Each student will get a chance to compete against a student on the opposite team to go up and answer a question on the board. When not taking a turn to answer a question at the board, students should be consulting or discussing how to complete the presented problem in case they have to go back to answering the question. **Day 2 Assessment** –Students will need paper/pencil to complete their summative assessment.

Name:_____ Date:_____

1. Subtract

5 tens	50
- 3 tens	-30
____ tens	_____

- 5 tens; 50
- 7 tens; 70
- 2 tens;20
- 3 tens; 30

2. Draw the model and write the number problem.

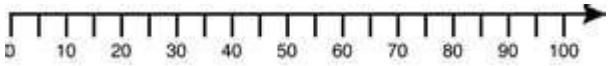
50-30

Tens	ones

____tens -_____ones=

50-30=_____

3. Use the number line to subtract. What is the difference?



50-40=_____

4. Subtract. What is the related addition fact?

80-50=_____

- 70+20=90
- 50-30=80
- 30+50=80
- 50-20=30

5. Draw the picture representations. Write the number sentences.

Paul received 40 magic marbles for his birthday from his brother. He gave away 10 to his best friend James. How many magic marbles does Paul have? Later, James decides to give the marbles back.

Name:_____ Date:_____

1. Substract (2 pts)

5 tens	50
- 3 tens	-30

__2__ tens __20___

- 5 tens; 50
- 7 tens; 70
- 2 tens;20
- 3 tens; 30

2. Draw the model and write the number problem.(3pts)

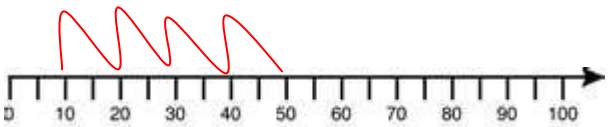
50-30

Tens	ones

___5_tens -___30__ones

50-30=__20___

3. Use the number line to subtract. What is the difference? (2 pts)



50-40=__10_____

4. Subtract. What is the related addition fact?(1pt)

4. 80-50=__30____

- 70+20=90
- 50-30=80
- 30+50=80
- 50-20=30

5. Draw the picture representations. Write the number sentences.(2pts)

Paul received 40 magic marbles for his birthday from his brother. He gave away 10 to his best friend James. How many magic marbles does Paul have? Later, James decides to give the marbles back.

oooooooooo oooooooooo oooooooooo oooooooooo

40 - 10= 30

oooooooooo oooooooooo oooooooooo oooooooooo

30 + 10= 40