Grade Level	Content Area	Course Title (for 9-12 Samples Only)	Unit Title
2nd Grade	Addition and subtraction		Applying addition and subtraction to the real world

Length of Unit	Time of Year Taught	Expected Prior Knowledge
1 Week	2nd Quarter	The students should be able to represent and solve addition and subtraction problems within 20 to one- and two- step word problems.

Unit Description

The students will be representing addition and subtraction word problems up to 100. The students will write the number sentences and express them orally. The learning will be done through centers and small group instruction. The students will work collaboratively to complete the tasks and activities in the centers. The small group instruction will be done through flexible grouping. The instructor will monitor the progress of the students and adjust the groups when necessary.

Standards:	**Operation and Algebraic Thinking** • Represents and solve problems involving addition and subtraction • Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem
Summative Assessment	The summative assessment will be compromised of 10 word problems with each one being worth 2 points. The students will receive 1 point for representing the problem with a number sentence and 1 point for the correct answer. The assessment will also be used as a pre-assessment to gauge students' prior knowledge. The students' will be representing and solving addition and subtraction word problems.
Scoring for Summative Assessment	Each problem in the assessment requires two answers so the students can receive two points per problem. Mastery = 16/20 A copy of the summative assessment along with the scoring rubric is attached.
Materials/Resources Needed	Variety of word problems Math Journal Manipulatives – Unifix cubes, counters, etc. Index cards Markers Balloon cards Subtraction Clown record sheet Computers

	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5
Instruction and Timeline	The teacher will explain to the class that they will be taking a pre-assessment. The class will be instructed that this will provide the teacher with information on the prior knowledge that the students have coming into this unit. The teacher will then analyze the data and form six leveled small groups for this unit. The groups don't need to have the same amount of students. The students who fall far below (10 or less correct), approaches (11 to 15 correct), or mastery (16 to 20 correct). This will allow the teacher to create small group instruction focused on the needs of the students.	The teacher will begin the class explaining the 6 centers the students will be actively engaged in over the next three days. The groups will be participating in 2 centers per day. The teacher will walk the students through the six stations. After each station, the teacher will direct the students to think-pair-share the expectations of the center. The teacher will then break the students into small groups. The centers will be replenished with new problems so they are different each rotation through. There will also be differentiation in the fact that the problems for the centers will change depending on the skill level of the group assigned to that center.	Falls far below groups: The teacher will model a lesson tailored to addition and subtraction. The teacher will demonstrate addition and subtraction using blocks. The teacher will model a problem and the students will follow along with their blocks. The problems will be focused on basic addition and subtraction: 35 – 10 = 25 or 40 + 11 = 51. The teacher will then give each student in the group basic problems and ask the students to make the problem with blocks and record it in their journals. This small group will be called throughout the school year and increasing the level of difficulty to achieve mastery level. The teacher will monitor each student closely and move students to a higher group when necessary.	Approaching groups: The teacher will demonstrate how to use manipulatives and various ways to solve addition and subtraction word problems. During guided practice, the teacher will provide examples in two forms: basic number sentence represention and word problems. The word problems will be one-step and focus on writing out what the problem is asking. The values used will progress as mastery is begun to be shown. The teacher will continue to progress monitor the students. Individual students made be moved to the higher group or lower group at the instructors discretion. This allows for the students to continue growing at their own level.	Mastery group: The teacher will be creating lessons based on the standard but a higher level. These students will most likely be out of the concrete stage but will still have access to manipulatives. The teacher will focus on multi-step word problems where the students will write their solution in as many ways as possible. Guided Practice problem: Joe started with $33 and decided to buy some candy which costs $12. When he got home, his mom gave him his monthly allowance of $45. How much money does Joe have after receiving his allowance? The instructor demonstrates the thought process and models the work down to find the solution. The students write the process in their interactive math

					journal. The teacher will then provide more real world problems for the students to solve. They will closely monitor the students' progress to make sure all students are at the appropriate level.
	Lesson 1	**Lesson 2**	**Lesson 3**	**Lesson 4**	**Lesson 5**
Student Activities and Timeline	The students will be taking a pre-assessment that will be used to place them into appropriate groups for this unit.	The students will think-pair-share the expectations of each center and ask clarifying questions when they arise. **Centers:** Word Problem Creation - The students will write their own addition and subtraction word problems in their math journals. The students will trade problems and solve his/her partner's problem. Manipulatives will be provided to assist in solving the problems. Student Computers – The students will play a variety of teacher-selected addition and subtraction activities that focus on the skills needed in this unit. Exemplar Stations – The	The students will be creating models of the sample problems given by the instructor. They will represent each problem in a multiple of ways. They will record all work and solutions in their interactive math journal.	The students will be creating models of the sample problems given by the instructor. They will represent each problem in a multiple of ways. They will record all work and solutions in their interactive math journal.	The students will be creating models of the sample problems given by the instructor. They will represent each problem in a multiple of ways. They will record all work and solutions in their interactive math journal.

		group will be provided with a real world problem. The focus of the problem will be addition and subtraction. The students may use manipulatives and group collaboration. They will need to demonstrate their thinking through written expression and/or diagrams. All responses will be done in the interactive math journal. <u>Number Sentence Creations-</u> The teacher will create number cards which will be flipped over in the middle of the table. The students will take turns drawing numbers and creating number sentences. There will be another pile of operation signs the students will draw from. They will write the number sentence in their notebook and solve the problem. <u>Clowning around-</u> The students will choose a balloon card and record the multi-digit subtraction problem from the card onto the Subtraction Clown recording sheet. They will solve the subtraction problem and use addition to check your solution.			

Summative Assessment

Mastery = 16/ 20

Each question is worth 2 points: 1 point for representing the number sentence and 1 point for the correct answer.

1. There are 85 bottle caps in a box. Theresa takes 5 bottle caps. How many are left?

2. There are 86 blocks in a box. Heather takes 82 blocks. How many are left?

3. There are 11 candies. 6 candies more are added. How many are there total?

4. If there are 32 bottle caps in a box and Douglas puts 56 more bottle caps inside, how many bottle caps are in the box?

5. There are 15 erasers. 28 erasers more are added. How many are there total?

6. Susan starts with 68 eggs. Steve takes 13 away. How many eggs does Susan end with?

7. Henry weighs 31 pounds. Aaron weighs 22 pounds. How much heavier is Henry than Aaron?

8. Thomas has 71 bottle caps. 53 are eaten by a hippopotamus. How many bottle caps will Thomas have?

9. Andrew starts with 8 oranges. He gets 47 more from Howard. Andrew then gives 21 to Beth. How many oranges does Andrew end with?

10. Jose starts with 37 apples. Michelle takes 34 away but then gives 10 back. How many apples does Jose end with?

Summative Assessment – Answer Key

Mastery = 16/ 20

Each question is worth 2 points: 1 point for representing the number sentence and 1 point for the correct answer.

1. There are 85 bottle caps in a box. Theresa takes 5 bottle caps. How many are left?
   85 – 5 = 80

2. There are 86 blocks in a box. Heather takes 82 blocks. How many are left?
   86 – 82 = 4

3. There are 11 candies. 6 candies more are added. How many are there total?
   11 + 6 = 17

4. If there are 32 bottle caps in a box and Douglas puts 56 more bottle caps inside, how many bottle caps are in the box?
   32 – 56 = 88

5. There are 15 erasers. 28 erasers more are added. How many are there total?
   15 + 28 = 43

6. Susan starts with 68 eggs. Steve takes 13 away. How many eggs does Susan end with?
   68 – 13 = 55

7. Henry weighs 31 pounds. Aaron weighs 22 pounds. How much heavier is Henry than Aaron?
   31 – 22 = 9

8. Thomas has 71 bottle caps. 53 are eaten by a hippopotamus. How many bottle caps will Thomas have?
   71 – 53 = 18

9. Andrew starts with 8 oranges. He gets 47 more from Howard. Andrew then gives 21 to Beth. How many oranges does Andrew end with?
   8 + 47 – 21 = 34 or
   8 + 47 = 55 and 55 – 21 = 34

10. Jose starts with 37 apples. Michelle takes 34 away but then gives 10 back. How many apples does Jose end with?
    37 – 34 + 10 = 13
    37 – 34 = 3 and 3 + 10 = 13