

WVSU Lesson Plan Template (revised 1.2022)

CRITICAL INFORMATION	
Teacher Candidate: Mackenzie Dunlap Subject: Math Grade Level: 3rd School Based Supervisor: Dr. Wylie	Teaching Date: October 3, 2023 Time: 10:50-11:30 and 12:50-1:30 Duration (<i>in minutes</i>): 80 minutes WVSU Course: EDUC 426
Lesson Overview & Rationale: <i>Brief overview of the lesson and why it is being taught.</i>	In this lesson, the students will be exploring how the operation of subtraction and addition are related through an interactive Nearpod. Subtraction is being taught because it is one of the four basic operations used in mathematics. Subtracting is a useful skill for students to learn because they will use this mathematical operation to perform important tasks in their everyday lives. Some of these tasks may include making change at the store when purchasing items, keeping the score during a sporting event, or completing taxes. Also, it is a crucial skill for students to study the relationship between addition and subtraction to prepare young learners for other mathematical operations such as multiplication and division.
WV College & Career Readiness Standards http://wvde.state.wv.us/policies/ https://wvde.us/tree/	
College-and-Career Readiness Content Standards: <i>copy paste, highlight specific indicators for this lesson.</i>	Standard M.3.8 Solve two-step word problems using the four operations, represent these problems using equations with a letter standing for the unknown quantity. Asses the reasonableness of answers using mental computation and estimate strategies including rounding. Instructional Note: This standard is limited to problems posed with whole numbers and having whole number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order (Order of Operations). M.3.11 Fluency add and subtract within 1000 using strategies and algorithm based on place value, properties of operations, and/ or the relationship between addition and subtraction.

WVCCR Standards: Technology & Computer Science and/or Dispositions for Student Success: <i>copy paste, highlight specific indicators for this lesson.</i>	1.2.b (student) Students engages in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices 2.5.b (teacher) Design authentic learning actives that align with content area and use digital tools and resources to maximize active, deep learning ● If technology fail, I will have a printed copy of the Nearpod slides prepared to reference throughout the lesson. I will write the questions on the board for the students to reference as a visual aid. The students will use their white boards to answer the questions for a formative assessment.
Student Learning Objective: <i>Audience, Behavior, Condition, Degree of Proficiency</i>	1. Students will be able to explain the relationship between addition and subtraction with 80% accuracy. 2. Students will be able to solve two-digit subtraction problems with 80% accuracy.
Anticipated Content Difficulties: <i>misconceptions, lack of prior knowledge, skill sets, and differing abilities which connect directly to differentiation</i>	I anticipate some students will have difficulties understanding how subtraction and addition undo each other. I also anticipate some students will continue to add although they are to subtract because this is a new skill for them. I anticipate other students will struggle to keep the ones and tens place value in order and subtract the incorrect numbers from each other. The students may also have difficulties organizing the different place values as well as their regrouping. Students with IEPs may have difficulty reading the directions or the text on the slides, therefore making it difficult to complete the required tasks. On the other hand, the gifted students in the class may become bored and need more challenging questions as the lesson progresses.
PLANNING	
Assessment: <i>Label as formative and/or summative, description of assessment strategies and</i>	Pre-test/ Diagnostic: I will begin the lessons by requiring the students to complete a pre-assessment based on the topics that will be taught during the unit plan. I will assess students' prior knowledge by using a collaborative board on Nearpod. The students will be required to answer the question, "What do you already know about subtraction and regrouping?" The students will be required to type their responses in the text box and post them for the class to view. I will use this diagnostic assessment to meet the needs of my

<i>feedback; attach assessment</i>	students to scaffold the material based on the information the students may know or may not understand. Formative assessment: I will check for understanding through the lesson by using the assessments on Nearpod. These assessments include collaborative boards, drawing tools, and DOK level two and three discussion questions. The question-and-answer techniques will be verbal. I will also check for understanding by allowing the students the opportunity to come to the board and perform the subtraction on the board and the anchor chart. Summative assessment: After the lesson is complete, I will be able to evaluate the student's level of content knowledge by reviewing their practice sheets. I can use the results from this assessment to clear misconceptions during the second lesson of the unit plan. I will be able to understand gaps in student learning and reteach these topics before the class moves on and before the test at the end of the week.
Reteach Statement: <i>What will you do if students do not meet degree of proficiency?</i>	If the students do not score an 80% or above (or a 10/12) on the two-digit subtraction practice sheet then I will reteach. I will do this by doing more whole-group example problems on the board with the class following the "I do, we do, you do" model. The students will be given an opportunity to practice the skills they are struggling with by completing an exit ticket.
Academic Language: <i>e.g., specific vocabulary for the content area</i>	● Inverse operations ● Regrouping ● Addition ● Subtraction ● Standard algorithm ● Break-apart strategy
Research Based Strategies: <i>e.g., small group, cooperative learning, manipulatives, graphic organizers, KWL,</i>	Cooperative learning: The students will be given the opportunity to complete the practice sheet with their peers. The students are already seated in groups of three to four at each table. This form of cooperative learning serves as a peer tutor for struggling students and solidifies student learning by strengthening his or her explanation of the material if the student is ready to extend their learning.

*comparisons,
summarizing,
accessing prior
knowledge*

Manipulatives: The students will be using base ten blocks to represent each two-digit number. As the students begin to subtract the larger number from the smallest number the students will be using the base ten blocks to represent regrouping. The students will be given the opportunity to draw and manipulate the base ten blocks using the Nearpod program. I will also have an anchor chart on the board with Velcro dots on it to place the base ten blocks on the board. The chart will be divided into two groups. One side will be labeled “tens” and the other side will be labeled, “ones.”

Graphic organizers: The anchor chart will serve as a graphic organizer to ensure students place their digits in the correct place value locations. The students will have an ongoing graphic organizer to keep track of their vocabulary words throughout this unit. The students will also be provided with a subtraction checklist to provide them with step-by-step instructions on how to solve the subtraction equation. Also, the Nearpod slides will offer the students a variety of methods to organize their answers. The students will be required to write their responses in a graphic organizer. The students will also be required to use their place value chart to organize the base ten blocks.

Comparisons: To show the relationship between addition and subtraction the students will be required to compare the two mathematical operations. The purpose of this comparison is to demonstrate the relationship between addition and subtraction and how they can undo each other. This is called inverse operations, which is a vocabulary word that will be listed on the student’s vocabulary organizer.

Accessing prior knowledge: I will access student’s prior knowledge by requiring them to complete a pre-test. I will also access the students’ prior knowledge by asking the students to complete a collaborative board on Nearpod. I will ask the students, “What do you already know about subtracting and regrouping?” The students will be required to post their answers on the board so we may discuss their responses as a class. I will use the results of the assessments to clear prior misconceptions and scaffold my instruction to meet the needs of my students.

Summarizing: At the end of the Nearpod slides, the students will be required to discuss what they have learned today. The students will have to summarize key points, skills, and topics that were discussed throughout the lesson.

	Drawings: Throughout the Nearpod, the students will be required to draw their work based on the strategy the students are using. The drawings will consist of base ten blocks and how you must break the blocks apart in order to regroup. Collaborative boards: The students will be required to post their answers to discussion questions using collaborative boards. The students will also be required to post their answers to each subtraction problem on collaborative boards embedded into the Nearpod slides.
Materials: <i>needed to teach this lesson, including TECHNOLOGY</i>	● Students iPad ● Teacher iPad ● Pencil ● Pre-test ● Anchor chart ● TV ● Board ● Dry erase markers ● Base ten blocks (tens and ones) ● Velcro dots ● Subtraction Check list ● Vocabulary graphic organizer ● Practice sheet with graphic organizer ● Exit ticket ● Nearpod: https://cc.nearpod.com/6340471a9b3e5dd7e968f7f85b2e7230-1/1888335212
LESSON PROCEDURES	

Anticipated Management Difficulties: <i>Transitions,</i>	I anticipate the students will have difficulties transitioning from one activity to another. I also anticipate the students will become chatty during each of the Nearpod slides. If the students become too loud, I will use the classroom doorbell as an attention-getter. I also anticipate the students will become extremely fidgety because math time is before lunch and at the end of the day. If the students are becoming too fidgety, we
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<i>cooperative learning, pacing, Brain Breaks, materials management</i>	will take a brain break and use an interaction go-noodle video on YouTube. I also anticipate the students will have difficulty managing Nearpod because it is a new program for the students to learn how to use.
Before/Introduction/Hook: <i>state the learning objective, set the stage, activate background knowledge, capture student interest</i>	Hook: “Imagine you are at the beach and you are playing in the sand. You can feel the slight breeze hit your face, the sun in beating on your skin, and you hear the waves crash on the shore. Everything is perfect... except for one thing. You believe your little brother took some of the shovels you were using to build your sand castle, but you don’t know how to subtract. How shall we find out if our little brother stole our shovels if we don’t know how to subtract?” Introduction: “Well, today we are going to be learning how to subtract two-digit numbers that must be regrouped in order to subtract them. We will be learning two different strategies to subtract and regroup two-digit numbers. We will also be learning how to check our answers and even create our own questions by the end of this lesson. We are learning this skill because subtraction is one of the four operations in math. Learning about subtraction strengthens our understanding of addition. We also use subtraction throughout our everyday lives such as keeping score in a game, making change in a store when we are purchasing items, or even figuring out if our little brother did steal our shovels on the beach. I would appreciate it if everyone tried their best, so turn your listening ears on throughout the lesson. Okay class, let’s get started!”
During: <i>detailed list of teacher and student behaviors</i> Explicit Instruction: <i>e.g., or input, modeling, checking for understanding, guided practice, and independent practice (“I do, we do, you do”); or</i> Inquiry-Based Instruction: <i>question, research, present,</i>	Before the lesson begins, I will write the website and code to join on the board for all students to reference while they are logging in. Also, I will have the anchor chart ready on the board with the Velcro dots already on the base ten blocks. The students will be seated at their desks at the beginning of the lesson. I will begin giving instructions about the pre-test. •I will state, “Today we are going to take a pre-test. The pre-test is not for a grade. This is for me to be able to see what we already know and what we may need help with. There is no need to be anxious or upset if we don’t score 100% on this assignment. We have not taught this skill to you, so we do not expect you to know everything, but we do expect you to try your best. After the classroom helper passes out the pre-test to you, please write your name and date at the top. I will also be handing you your classroom office dividers, please make sure to use these properly because I want to know what you know, not what your friend knows. When you have finished your test raise your hand and I will come collect it from you. If you finish early, please read

reflect or

5 E's: *engage, explain, explore, elaborate, evaluate*

Note: *be sure to address child growth & development, learning styles, multiple intelligences, scaffolding, and cross-curricular integration if appropriate*

a book until we are ready to move on.”

- I will hand the pre-test to the classroom helper and they will pass the pre-tests to the students. I will begin passing out the classroom offices (the classroom offices are dividers used to prevent cheating since the classroom has tables instead of desks). I will walk around the room to answer questions and check to see if the students are completing the pre-test. During this time, I will orally read the questions on the pre-test to the students who have IEPs. As the students have completed their pre-tests, I will collect the pre-tests and their classroom offices. I will place the classroom offices in their respective locations and the assessments face-down on my desk.
- Once every student has completed their pre-test I will say, “Now that we have completed our pre-test, I am sure we have lots of questions, but we are going to keep our questions to ourselves for the moment and see if they are answered today. If your question has not been answered by the end of class, feel free to ask to ask it. We are now going to be moving to our vocabulary graphic organizer. We will be adding to this graphic organizer throughout the next three days. When we learn about each vocabulary word, we will be writing important things about that word to help us remember what it means. Remember, if we are struggling to remember the word or what it means, we can always reference our math wall in the back of the classroom.”
- I will ask the classroom helper to pass out the vocabulary graphic organizers to everyone in the class. I will say, “Please remember to write your name on your vocabulary organizer. After you have completed that step give me a thumbs-up so I know you are ready to move on.”
- I will wait for all students to show me a thumbs-up, “Now please place your papers over to the side because we will be coming back to your graphic organizers later throughout the lesson. Next, I will need you to grab your iPads. You will need to go to your Safari app and type in Nearpod. Please give me a thumbs-up when you have successfully searched this website.” I will wait for all students to show me a thumbs-up. Then I will say, “Please use the code on the board to log into our classroom session. When you have successfully logged in, silently show me a thumbs up and wait for all of our classmates to log in too.”
- **Slide one:** Once the students have signed into Nearpod I state the hook and introduction listed above.

Then, I will read the title of the first slide.

•**Slide two:** I will say, “Today we are going to be learning about the relationship between subtraction and addition. Another thing we are going to be learning about is how we regroup when completing a subtraction equation. We will also be learning how to subtract using two different methods. Remember, the best part about math is how we can use different strategies to arrive at the same answer. So, just because someone may think one method is easier than the other doesn’t mean it is wrong as long as the end result is the correct answer. Can anyone predict how to subtract using the break-apart method?” I will ask three student volunteers to answer the question and share it with the class. I will say, “Can anyone predict how to subtract using the standards algorithm?” I will ask three student volunteers to answer the question and share it with the class. We will discuss student responses.

•**Slide three:** I will say, “This slide is called a collaborative board where we can share our thoughts and ideas with our classmates. You may use the text box tool, pictures, and voice recording button located at the bottom of the screen to answer the question. The question says, “What do you already know about subtracting and regrouping?” I will allow the students three minutes to answer the question. The students and I will discuss the student responses as they are posted to the collaborative board. I will use this assessment to clear prior misconceptions and understand what the students already know about this topic. The classroom discussion will last three minutes.

•**Slide four:** I will say, “Some of us probably already know this, but we are going to listen and be respectful to other students who are struggling to review this topic. If we see a two-digit number, it must have a digit in the one's place and the tens place. Some examples of two-digit numbers are 34, 85, 92, and 41. Can you think of any other two-digit numbers that are not listed on this slide? I will ask three student volunteers to answer the question and share it with the class. I will say, “Why are these numbers two-digit numbers?” I will ask one student volunteer to answer the question and share it with the class. Then I will say, “These are two-digit numbers because there is a digit in the ones place and the tens place.”

•**Slide five:** I will say, “The title of this slide says, ‘How do we represent two-digit numbers using the base ten blocks?’ turn to your partner and tell them how we represent two-digit numbers using base ten blocks.” I will allow the students one minute to discuss the question with their partner. I will say, “Now that we have

shared our answers with our partners, let's share them with the class. Who would like to volunteer to share their answers with everyone." I will ask three student volunteers to share their answers with the class. We will discuss student responses with the class. Then I will say, "We represent two-digit numbers using base ten blocks by using rods and one's units. For the example on this slide, we are demonstrating the number 54 using base ten blocks. I will need five rods to represent five groups of tens and then four ones blocks to represent four in the ones place. How would I use base ten blocks to represent 62? Can I have a student volunteer come to the board and demonstrate this on our chart?" I will ask a student to complete the task. The student will come to the board and complete the task. We will discuss their answers with the class. I will say, "To demonstrate 62 using base ten blocks, we will need to have six rods to represent sixty blocks and then two ones unit blocks to represent the 2 in the ones place. Does anyone have any questions?" I will allow thirty seconds for student questions.

•**Slide six:** I will say, "Now we will be drawing the number 16 using the base ten blocks on the chart provided for you. You may use the draw tool located at the bottom of your screen to complete this task." I will allow the students three minutes to complete this task. Once the students have completed this task, their answers will be posted on the TV for everyone to see. We will discuss student responses with the class to clear any misconceptions. I will say, "We represent the number 16 using base ten blocks by using one rod to represent 10 blocks and then 6 ones blocks to represent the 6 units in the ones place. Does anyone have any questions?" I will allow thirty seconds for student questions.

•**Slide seven:** I will say, "The title of this slide says, 'What is regrouping?' can anyone tell me what regrouping is based on what this slide says?" I will call on one student volunteer to answer the question. We will discuss student responses with the class. Then I will say, "Regrouping means changing the composition of tens to ones while making sure we still have the same value that we started with. We use regrouping in subtraction when the top number is smaller than the bottom number. Please get your vocabulary sheet out and grab a pencil. You will need to write the definition of regrouping on your vocabulary organizer. When you have completed this task, please give me a thumbs up to show me that you are ready to move on. Also, when you are finished you may place your vocabulary graphic organizer to the side." I will give the students three minutes to complete this task.

•**Slide eight:** I will say, "Now after becoming more familiar with regrouping, let's take a look at this question.

The question says, ‘Do you think you would need to regroup to solve the problem 70-14? Why or why not?’ You may use the text tool on your screen to answer this question.” I will give the students three minutes to answer the question. The students and I will discuss their responses once they are posted on the board. Then I will say, “We would need to regroup because if we look in the ones place, we cannot subtract 0 from 4 so we must regroup. Can anyone predict how we regroup?” I will ask three student volunteers to answer the question and we will discuss their responses as a class.

•**Slide nine:** I will say, “We somewhat discussed this in the last slide, but when do we know to regroup?” I will ask a student volunteer to answer the question. I will say, “We regroup when the number on the top is smaller than the number on the bottom of the subtraction equation. For instance, in the number subtraction equation $44-12$, we do not need to subtract regroup because the number 4 is larger than the number 2. We can also subtract $4-2$ to equal 2. On the other hand, if we look at the subtraction equation $41-12$, we must regroup because 1 is smaller than 2. How do you think we have to regroup the number 41 to subtract it by 12?” I will call on three student volunteers to answer the question and we will discuss student responses with the class.

•**Slide ten:** I will say, “We will be watching a video that discusses and demonstrates how to regroup subtraction equations. Please listen and watch the video carefully.”

•**Slide eleven:** I will play the video for the students to watch. I will pause the video periodically to check for understanding. The students and I will review the material in the video after we have completed watching it.

•**Slide twelve:** I will say, “The best part about math is how there are always multiple ways to solve a problem. Today we will be learning two different strategies for regrouping when completing subtraction problems. The first strategy is called the break apart strategy.”

•**Slide thirteen:** I will state the information listed on the slide. Then I will say, “If we were to complete the subtraction problem $32-17$, will we need to regroup?” I will for a student volunteer to state and explain their answer to the class. I will say, “We will have to regroup because we cannot subtract 2 from 7. We will represent the number 32 by three tens rods and two ones blocks.” I will place these blocks on the anchor chart.

•**Slide fourteen:** I will say, “In order to regroup, we will need to break apart one of tens rods into ten separate ones units. So, I am going to take away one tens rod, which will leave me with 2 groups of ten, which equals 20. Then I will take my individual ten blocks and add them to the other two blocks. Therefore, I would have 12 ones blocks. If I added 20 to twelve it would equal 32. Therefore, we create the same number, but represent it in a way which we can subtract.” I will represent the regrouping using the base ten blocks on the anchor chart.

•**Slide fifteen:** I will say, “Now we are able to subtract the difference. If I subtract 10 from 20, I will be left with one tens left. If I am subtracting 7 one from 12 I will be left with five ones. Therefore, my answer is $10+5$ or 15.” I will demonstrate this with the class using the anchor chart.

•**Slide sixteen:** I will ask, “Let’s see if your answer is correct. The correct answer is 15. Do we need to do another example problem to ensure we understand?” I will wait for student responses. If the students ask for another problem, then we will complete another problem together.

•**Slide seventeen:** I will say, “Now it is your turn to complete a problem using the break-away strategy. You will be completing 71-14. You will demonstrate your work using the drawing tool at the bottom of your screen. I will give you five minutes to complete this problem.” Once the students have completed this subtraction equation, we will review their answers on the board. I will say, “Now that we have completed our subtraction problem, is there a student volunteer who would like to come to the board and demonstrate 71-14 using the base ten blocks?” I will ask one student volunteer to complete this problem on the board. The class and I will discuss student responses. I will say, “We will need seven rods. We need to place a one in the ones column of the anchor chart. We need to subtract 14 from 71 so we need to regroup. We will break apart one of the tens rods into ten ones units. I will take my ones units and move them to the other side of my chart in the ones column. After counting all of the blocks in the ones column we have 11 blocks, therefore I will subtract 4 from 11 to equal 7. We are left with ten groups of 5 and 7 ones. Therefore $71-14=57$.” I will place the blocks accordingly on the anchor chart.

•**Slide eighteen:** I will say, “You will be completing 92-28. You will demonstrate your work using the drawing tool at the bottom of your screen. I will give you five minutes to complete this problem.” Once the students

have completed this subtraction equation, we will review their answers on the board. I will say, "Now that we have completed our subtraction problem, is there a student volunteer who would like to come to the board and demonstrate $92-28$ using the base ten blocks?" I will ask one student volunteer to complete this problem on the board. The class and I will discuss student responses. I will say, "We will need nine rods. We need to place a two in the ones column of the anchor chart. We need to subtract 28 from 92 so we need to regroup. We will break apart one of the tens rods into ten ones units. I will take my ones units and move it to the other side of my chart in the ones column. After counting all of the blocks in the ones column we have 18 blocks, therefore I will subtract 4 from 11 to equal 7. We are left with ten groups of 6 and 7 ones. Therefore $92-28=64$." I will move the blocks on the anchor chart accordingly during this demonstration.

•**Slide nineteen:** I will say, "The second method we will be using to learn how to regroup while solving subtraction equations is called the standards algorithm. This is the most common way to subtract and is probably the method your parents will be most familiar with. I believe this method is just a more simplified version of the break-away strategy. Can anyone predict what the break-away strategy is?" I will call on three student volunteers to answer this question and share it with the class.

•**Slide twenty:** I will read the information on the slide. Then I will say, "We have to regroup when subtracting $32-17$ because we cannot subtract $2-7$ in the ones place. Does anyone know how we regroup using the standard algorithm? I will call on a student volunteer to answer. We will discuss the student responses as a class.

•**Slide twenty-one:** I will say, the first thing we need to do when solving subtraction problems using the standards algorithm is arranging the numbers vertically in the appropriate place value. We need to make sure that we organize our information by putting the ones on top of each other and the tens on top of each other. This way we can easily see what we are subtracting. So, if I am subtracting $32-17$ the number 32 will go over the number 17. When you subtract you place the larger number on top. As you can see, 32 is larger than 17. That is why it is on the top."

•**Slide twenty-two:** I will say, "The next step is to regroup. You will take one group of tens away from 3 to make it 20. Then you will add the group of tens to the ones place to make $10+2=12$. So now we will actually be completing $12-7$ which equals 5 and then $2-1$ which equals 1."

•**Slide twenty-three:** I will say, “Let’s see if our answer was correct. The correct answer is fifteen. Turn to your partner and explain to them how we got 15.” I will allow one minute for the students to collaborate with their peers. I will say, “Would anyone like to share what they talk about with their partner?” I will call on three student volunteers. We will discuss their responses together as a class.

•**Slide twenty-four:** I will say, “Another great thing about math is how we can check our work. I can use another operation undo subtraction. Does anyone know what operation that is?” I call on one student to answer the question and we will discuss their responses with the class. I will say, “We can use addition to check our subtraction problems because they are opposite operations. This is called inverse operations. Let’s get our vocabulary sheet out and write the definition on our paper. When you have completed writing the definition, please show me a thumbs-up.” I will wait for all students to show me a thumbs-up.

•**Slide twenty-five:** We can check our work by adding the sum of the subtraction number and the smallest number in the subtraction equation to see if we get the largest number in the subtraction equation. For instance, if we add 17 to 15, we will get 32. Therefore, the answer we got for the last question is correct.”

•**Slide twenty-six:** I will say, “Now that we can discuss how to check your work and the standard algorithm, it is your turn to try this on your own. You will find the difference of $80-15$ then you will use addition to check your answer. Please show your work using the draw tool at the bottom of your screen.” I will allow the students five minutes to complete the problem. I will ask for a student volunteer to share their answer with the class. We will discuss their responses with the class. Then I will say, “The first step we do when completing the standard algorithm is arrange our numbers vertically. I will need to place 80 on top of 15. Don’t forget to include your subtraction sign and equation line. Then we need to regroup, so we need to take ten from 80 and give it to the ones. So, we will now have 10 ones and 7 tens. Now we subtract 5 from 10 to equal 5 in the ones place value and then I subtract 10 from 70 in the tens place value to equal 60. Now let’s check our work. To check our work, we need to use addition, so I will be adding the sum of my subtraction problem to my lowest number in the subtraction equation to see if it equals to biggest number. So, I will add $60+15$ which equals 75.”

•**Slide twenty-seven:** I will say, “You will be finding the difference of $34-19$ then you will be using addition to

check your answer. Please show your work using the draw tool at the bottom of your screen.” I will allow the students five minutes to complete the problem. I will ask for a student volunteer to share their answer with the class. We will discuss their responses with the class. Then I will say, “The first step we do when completing the standard algorithm is arrange our numbers vertically. I will need to place 34 on top of 19. Don’t forget to include your subtraction sign and equation line. Then we need to regroup, so we need to take ten from 80 and give it to the ones. So, we will now have 14 ones and 2 tens. Now we subtract 9 from 14 to equal 5 in the ones place value and then I subtract 20 from 10 in the tens place value to equal 15. Now let’s check our work. To check our work, we need to use addition, so I will be adding the sum of my subtraction problem to my lowest number in the subtraction equation to see if it equals to biggest number. So, I will add $15+19$ with equals 34.”

•**Slide twenty-eight:** I will say, “Now we are going to be doing a couple of problems called application problems. Application problems apply what we have been learning in the classroom to the real world or things that could be considered real-life experiences.” I will read the slide. I will say, “On the next slide, you will need to complete the chart using the text box or drawing tool.” I will give the students six minutes to complete this activity.

•**Slide twenty-nine:** I will say, “What operation did you use.” I will call on one student volunteer to answer the question. Then I will say, “We used subtraction. Why did we use subtraction?” I will call on one student volunteer. Then I will say, “We used subtraction because we are finding the difference. Will we need to regroup? Why or why not?” I will call on one student volunteer to answer the question. Then I will say, “We will need to regroup because we cannot subtract 2 from 8. What is our solution? The answer to our problem is 24.” I will write the problem out on the board as the students are doing it.

•**Slide thirty:** “I will read the slide. I will say, “On the next slide, you will need to complete the chart using the text box or drawing tool.” I will give the students six minutes to complete this activity.

•**Slide thirty-one:** I will say, “What operation did you use.” I will call on one student volunteer to answer the question. Then I will say, “We used subtraction. Why did we use subtraction?” I will call on one student volunteer. Then I will say, “We used subtraction because we are finding the difference. Will we need to regroup? Why or why not?” I will call on one student volunteer to answer the question. Then I will say, “We

	will need to regroup because we cannot subtract 7 from 9. What is our solution? The answer to our problem is 48.” I will write the problem out on the board as the students are doing it. •Slide thirty-two: I will say, “On this slide, you will be given the opportunity to create your own word problem using numbers where you must subtract and regroup. Feel free to include your hobbies your interests. I will allow five minutes for the students to complete their questions. The students will be given an opportunity to share their questions with the class. •Slide thirty-four: I will read the question from the slide. I will call three student volunteers to answer the question. The students and I will discuss these responses with the class. I will say, “Subtraction and addition are alike because they are both operations we use in math. They both help us solve problems.” •Slide thirty-five: I will read the question from the slide. I will call three student volunteers to answer the question. The students and I will discuss these responses with the class. I will say, “Subtraction and addition are different because they are inverse operations. They each other opposites because they undo each other.” •Slide thirty-six: I will read the question from the slide and open the floor for student discussion, questions, and answers. •I will say, “Now that we have completed the Nearpod, please place your iPad’s apples up. We will now be completing a practice sheet using our own base ten blocks. You are permitted to work with a partner or work with your groups. I will give the practice sheet to the classroom helper to pass out. Please remember to put your name and date on the paper.” I hand the papers to the classroom helper to pass out while I begin distributing the base ten blocks. During this time, I will walk around the room and answer questions to clear any misconceptions. •Once the students have completed their practice sheet, I will give them their exit slip to complete. After the students have completed their exit slips, I will state the conclusion.
Higher Order Questioning: <i>must occur throughout all</i>	DOK 1: What is subtraction? DOK 1: What is addition? DOK 1: What is regrouping?

<i>procedures, Blooms or DOK, utilize multiple levels & state level</i>	DOK 1: What are inverse operations? DOK 2: Can you predict how to use inverse operations to check our subtraction equations? DOK 2: Can you predict how to use the standard subtraction algorithm? DOK 2: Can you predict how to use the break-apart strategy to solve a subtraction equation? DOK 2: How are addition and subtraction alike? DOK 2: How are addition and subtraction different? DOK 3: Can you create a subtraction equation where you would have to regroup? DOK 3: Can you create your own word problem about something that interests you where you must create a subtraction equation that requires you to regroup?
After/Closure/Summary: <i>i.e., review key points, summarize and restate learning objective and clarify misunderstandings</i>	I will say, “Today we have learned how to regroup in subtract problems using two different methods. These two methods are called the standard algorithm and the break-away method. We discussed the relationship between addition and subtracting by discovering how they are inverse operations. We also learned how we can check our subtraction problems using addition. I am so proud of how hard everyone has worked today. Does anyone have any questions?
Differentiation: <i>What will I differentiate? Content, process, product, environment. How will I differentiate? For Readiness, Interest, Learning Profile, Affect/ Learning Environment. How will you address students with exceptional learners?</i>	Content: I will differentiate the content by reading all materials, directions, and resources orally. I will review and complete each question with the class. Process: I will differentiate the process by allowing the students to use collaborative boards, oral discussion questions, the drawing tool, and text box features on Nearpod. The students will also be provided with base ten blocks to use as manipulatives on the class anchor chart. The students will also be required to complete their practice sheets using paper and pencil. This lesson will incorporate a variety of tools during the learning process such as technology, manipulatives, and paper/pencil work. Product: N/A Learning environment: The students will be provided with a safe learning environment where they are encouraged to be engaged and share their ideas with their peers and instructor. I will differentiate the learning environment by allowing students the choice of flexible seating options. The students will also be permitted to work in their groups as they complete their practice worksheets.

	IEP accommodation #1 (Kennedy)- struggles with reading comprehension: During the last block of math, this student will be pulled from the classroom to receive resource services. To meet the requirements of her IEP during the first block of math, I will be reading all information, slides, and directions orally to the class. IEP accommodation #2 (Michael)- struggles with reading comprehension: During the last block of math, this student will be pulled from the classroom to receive resource services. To meet the requirements of his IEP during the first block of math, I will be reading all information, slides, and directions orally to the class. 504 Plan accommodation #5: (Caroline)- Dyslexic: I will allow second attempts on all assignments in order to meet the requirements of this 504 Plan. I will also have printed copies of my Nearpod slides on her table if she needs to reference the slides. 504 Plan accommodation #4 (Claire)- ADD: I will allow second attempts on all assignments and constant redirection to meet the requirements of this 504 Plan. I will pair this student with another peer who will aid in redirecting her attention. I will also walk by her desk while I am teaching to ensure participation.
POST TEACHING	
Self –Reflection: <i>Did the students meet the objective? What data supports this? What part of my lesson plan was most effective? How might I change this lesson to be more effective? Was my classroom management effective? Any other question you might need to address.</i>	Objectives/ Data: The students met the objective based on their guided practice scores. Only four students did not score an 80% or higher, therefore the class average proficiency rate was 81%. Most effective parts of the lesson: I think the most effective part of my lesson was using Nearpod as an interactive teaching tool. At first, I was skeptical about using Nearpod because the class had never used it before, but the students were engaged the whole time. Possible Improvements: If I were to teach the lesson again, I would not give the students a pre-test before starting instruction. The pre-test took nearly 15 to 20 minutes of our instructional time and put us behind in getting through the Nearpod slides the students needed to complete their guided practice. I more than likely would do a KWL chart with the class. Also, I would not make the students complete an exit ticket because it wasted more time.

	Classroom Management: My classroom management was very effective. I never had to raise my voice or redirect any of the students throughout the lesson. The students behaved so well that I gave them a point for their “Beat the Teacher” reward system.
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	Others: Overall, this was a very effective lesson based on the student’s guide practice results. I believe Nearpod is a great tool for students and teachers to use technology in the classroom. I will continue to use this program throughout my teaching career.
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