| Grade: $5^{\text {th }}$ | Subject: Math |
| :---: | :---: |
| Materials: Pencil, Paper, Whiteboard | Technology Needed: Smartboard |
| Instructional Strategies:    <br> $\square$ Direct instruction $\square$ Peer teaching/collaboration/ <br> $\square$ Guided practice  cooperative learning <br> $\square$ Socratic Seminar $\square$ Visuals/Graphic organizers <br> $\square$ Learning Centers $\square$ PBL <br> $\square$ Lecture $\square$ Discussion/Debate <br> $\square$ Other (list) $\square$ Modeling | Guided Practices and Concrete Application: <br> Large group activity <br> Independent activity <br> Pairing/collaboration <br> Simulations/Scenarios <br> Other (list) <br> Explain: <br> Students will first learn about how to do the big seven method in order to learn a new method for long division. They will also watch a video about how to do it as well in order to integrate technology into the lesson as well. Finally, they will work independently on their math assignment using the Big Seven method to solve the math equations. |
| Standard <br> 5.NBT.6-Using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division, find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | Universal Design for Learning <br> Below Proficiency: Students who are below proficiency in regard to math will be given problems that are easier to solve using the Big Seven method, as well as some more difficult ones in order to challenge them as well. I will also be roaming around the room and making sure that those kids are understanding how to use this method. If they struggle with the method, I will help them to better understand the material by doing some one-on-one time with the students. |
| Objective: By the end of the lesson, students will be able to use the Big Seven strategy to complete their math equations by using the strategy on their assignment to find whole number quotients. | Above Proficiency: Students who are above proficiency will be given the same worksheet as those who are approaching proficiency. If the assignment proves to be too easy for the students, they will then be given harder equations to try and solve. |
| Bloom's Taxonomy Cognitive Level: <br> Apply: Students will be able to solve long division math equations using the Big Seven method | Approaching/Emerging Proficiency: Students who are emerging proficiency will receive the same worksheet that everyone else does. If they find the assignment to be too easy, they will then receive the same accommodations that those who are in the above proficiency category. If they are struggling, they may receive some of the same accommodations as those who are in the below proficiency category; however, these students should not need to receive some easier equations. They will instead just receive some more one-on-one help. <br> Modalities/Learning Preferences: <br> - Visual: Students will be able to see how to use the Big Seven method in order to do a long division math problem. They will also see this through the YouTube video that they will watch in class before they start working on their assignment. They will also be able to see the anchor chart being created <br> - Auditory: Students will be able to hear how to solve long division equations using the Big Seven method |

> through me, as well as the YouTube video that they will watch in class.
> - Kinesthetic: Students will be able to trace out the big seven in order how to better do it. If some students want, they can come up and solve the problem on the anchor chart in order to get up and move around during that initial teaching part of the lesson.
> Tactile: Students will be able to touch the Big Seven in order how to better do it. Additionally, base ten blocks will be provided for the students in case they need it as a better visual.

Behavior Expectations- (procedures/expectations specific to the lesson, rules and expectations, etc.)
During the lesson, students will be expected to behave as if Mrs. Miller was teaching. Students will be expected to be at a voice level of 0 when I am teaching and/or talking. During work time, students will be expected to remain at a voice level of 1 . They may talk to their peers if they need help solving a problem, BUT they will not be allowed to just give answers to their peers. Additionally, students will also be watching a video during this lesson. While the video is playing, students are expected to be at a voice level of 0 in order to make sure that they comprehend the material that is in the video.

Classroom Management- (grouping(s), movement/transitions, etc.) No groupings are required for this lesson. As for movement, the students will not need to move. The only opportunity for movement during this lesson is when students will be asked to come up and solve a problem on the anchor chart if they want to. Finally, transitions will be done at the beginning, middle, and end of the lesson. I will use the phrase " $3,2,1$, talking is done" to which they will slow down their talking, and eventually stop talking. If the students continue to talk, I will go up to their "Quiet" board. If the students continue to talk, I will erase part of the part until the students stop talking. This is something that Mrs. Miller does throughout the day. As for the overall classroom management, I will be using Love and Logic. If the students are talking during the lesson, I will say " 1 'll wait." And then wait for the students to "finish" their talking. If they continue to talk, I will again walk up to their quiet board. Students will then transition their focus to me and transition from coming back from PE. After that, students will then focus on math. In the middle of the lesson, students will be transitioned from teacher time to independent work time. At the end of the lesson, students will be transitioned from math to getting ready to go to I\&E/Title 1 time.

| Minutes | Procedures |
| :---: | :--- | :--- |
| $\mathbf{5}$ | Set-up/Prep before lesson: <br>  <br>  <br>  <br>  <br> $\bullet$$\quad$Students will be transitioned from coming from PE - this will only take about one minute to do <br> Beady to go for the students |

$5 \quad$ Engage: (opening activity/ anticipatory Set - access prior learning / stimulate interest /generate questions, etc.)

- In order to engage the students, I will ask them how division has been coming along. I will pose the following question to the students:
- "How are you guys feeling about long division? (Wait for the students to answer)
- If the students address that they are doing well with it, I will then ask
- "Do you guys want to learn an even easier method to use for long division? It could help you guys to solve your problems even quicker!
- If the students address that they are struggling with the material, I will then ask
- "Do you guys want to learn a new strategy that will help you to understand how to do long division in an easier way?"
- Once the students respond, I will then introduce them to the Big Seven method.

10-15 Explain: (teacher-led)

- I will then explain to the students what the Big Seven method is. I will say to the class
- "The Big Seven method is a new strategy that you can use to help you solve long division math problems. With this method, it can provide you with more opportunities to fully understand how to do long division, and it can help you significantly on your assignments!"
- I will then pull out the anchor chart in order to show them how to do the Big Seven Method
- I will put the equation 84 divided by 4 . Once this is written onto the anchor chart, I will then say to the students
- "Okay class, in order to start off the Big Seven method, you first need to pull down the end of the dividing line down a bit in order to start. Once you do this, you are then ready to move onto your next step. Instead of figuring out how


## Math Lesson Plan \#1

## Date: 10/8/21

|  | many times 4 can go into 8, we are instead going to figure out how many times 4 can go into 84 . We are going to take out groups of 4 instead. What do you guys think would be the easiest grouping of 4 to do?" <br> - Students will supply their answers - once they give the correct answer (10 would be the easiest), we will move onto the next step. This gives us 40. <br> - "So, we know that 4 times 10 is $\mathbf{4 0}$. We will then write $\mathbf{1 0}$ on the opposite side of the seven. If we take 40 out of 84 , what number do we get?" <br> - The students and I will then subtract 40 from 84 . We will then see that we have 44 left. <br> - "If we have $\mathbf{4 4}$ left, and we know that $\mathbf{4}$ times $\mathbf{1 0}$ is $\mathbf{4 0}$, do you guys think that we could bump our next number from 10 to 11?" <br> - Once the students do this, we will then have zero left over, and they will have their answer. <br> - After this equation, I will then put the equation 57 divided by 5 onto the anchor chart. I will then ask the class <br> - "Who wants to help me solve this math problem? I think I may need some help with this one." <br> - One student will be selected to come up and help me for the first two steps. We will go through those first two steps - drawing the big seven, and then finding out how many groups of 5 can first go into 57 . Once these steps are finished, then I will ask for another student to come up and help me out. This student will find out how many groups of 5 can go into 7 . Once we subtract 5 from 7 , I will then ask the student <br> - "Is there anything else we can do? Or are we done with the math problem?" <br> The student will then need to say that there is nothing we can do - the answer would then be 11 with a remainder of 2 . <br> - I will then show the following video to the students in order to give them a different perspective of another teacher describing how to do the big seven method. Throughout the video, I will stop it and ask the students what the next step they think the teacher will take is. <br> - https://youtu.be/Zyn2yALYkK8 |
| :---: | :---: |
| 10-15 Elaborate: (concreate practice/application with relevant <br> Once students finish the video, they will then wo <br> students. During this assignment, students are a <br> 0 <br> However, the students should predom <br> understand how to do this material on <br> do it for their assessments. They can w  | Elaborate: (concreate practice/application with relevant learning task -connections from content to real-life experiences) <br> - Once students finish the video, they will then work on a math assignment that Mrs. Miller has printed out for the students. During this assignment, students are allowed to do some collaboration with the problems. <br> - However, the students should predominantly work on this on their own. The students will need to be able to understand how to do this material on their own and doing it alone will help them to better understand how to do it for their assessments. They can work on a few of the problems with some of their peers. |
| $5 \quad$ Closure (wrap up and transition to next activity): <br> - Once the lesson is done and the students have s <br> "How did you guys feel about this me do long division? <br> - We will then do a short math understand the material at h <br> - After this, they will then be | Closure (wrap up and transition to next activity): <br> - Once the lesson is done and the students have submitted their assignments, I will say to the students <br> - "How did you guys feel about this method? Do you guys feel like it helped you to better understand how to do long division? <br> - We will then do a short math talk, talking about whether or not it helped the students to fully understand the material at hand. <br> - After this, they will then be transitioned into their I\&E/Title One time. |
| Formative Assessment: (linked to objective, during learning) <br> - Progress monitoring throughout lesson (document of student learning, data collection) <br> Throughout the lessons, student learning will be monitored from their engagement during the lesson. I will ask ALL the students to make sure that they are understanding the material at hand. Long division has been a complicated topic for them, so I want to make sure that there are multiple check-ins throughout the lesson in order to make sure that they are understand the material at hand. By doing this, the students will be able to have more formative assessments other than just their assignment. | Assessment: (linked to objective, during learning) ess monitoring throughout lesson (document of student ing, data collection) <br> the lessons, student learning will be monitored from their t during the lesson. I will ask ALL the students to make ey are understanding the material at hand. Long division complicated topic for them, so I want to make sure that multiple check-ins throughout the lesson in order to make ey are understand the material at hand. By doing this, the ill be able to have more formative assessments other than signment. <br> Summative Assessment (linked back to standard, END of learning) <br> The students' summative assessment will be their end of the unit test. They will take this once they will be assessed on their knowledge of the material at hand. They will take this assessment, but the students will come back to this material later in the year in order to make sure that they can fully master this standard. |

Teacher Reflection (What went well? What did the students learn? How do you know? What changes would you make?):
For this lesson, I feel like it went very well. There are a few aspects of it that made me feel this way. The first reason I feel this way is due to the fact that my students breezed through the material like it was nothing. When I had planned this lesson with my teacher, we were not sure if they were going to be able to pick up on some this concept, as it can be very confusing for a lot of students. However, my students proved us wrong. To a lot of them, it helped them to understand how to do long division in an easier manner. This helped make the lesson a lot easier to teach, as the kids were excited to learn about this method. The second reason I feel this way is because student engagement throughout the lesson was very strong. The students were always raising their hands and always trying to answer the questions. When I asked for a volunteer to come up and help me out, I didn't anticipate as many students to volunteer - nearly everyone raised their hand. This also helped the lesson to feel really good, as it showed to me that the kids were excited to learn about this. Finally, I feel that the lesson went well due to the fact that a lot of the kids were using the Big Seven Method on their assignment they got after the lesson. The students learned how to use the Big Seven method for long division. I know this due to the fact that a lot of students used the Big Seven method on their next math assignment and continued to use it on other long division math assignments as well. This was not required of students to do - in fact, students were told they did not have to use the Big Seven method if they did not want to - it was just another strategy for them to use when doing long division. One thing that I would change during the lesson is to include more examples to do within the lesson. While I felt like the lesson was successful for the most part, one thing that I previously mentioned was that students had breezed through the material. While that was really awesome to see, it made me realize I needed more examples, as I didn't include enough examples in order to be fully prepared for the student's understanding of the content.

Math Lesson Plan \#1 Date: 10/8/21

The "Big Seven" Method

$$
4 \longdiv { 8 4 } \quad 5 \longdiv { 5 7 }
$$

