Lesson Plan Template

| Grade: 5th | Subject: Math |
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| Materials: Workbook, Pre-assessment printed, poster, pencils | Technology Needed: ActiveBoard |
| 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> $\square$ Technology integration $\square$ Modeling <br> $\square$ Other (list)   | Guided Practices and Concrete Application: Large group activity Hands-on <br> Independent activity Technology integration Pairing/collaboration Imitation/Repeat/Mimic <br> Simulations/Scenarios <br> Other (list) <br> Explain: |
| Standard(s) <br> 5.NF. 4 Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. | Differentiation <br> Below Proficiency: <br> Students who are struggling with the concept will have the opportunity to work one-on-one with a teacher while other |
| Objective(s) <br> By the end of the lesson, students will be able to solve problems including the multiplication of a fraction by a whole number, by using a visual model or additive strategies. <br> Bloom's Taxonomy Cognitive Level: Apply | students are in the "explore" section. Using both the visual and additive strategies may be confusing, so if they are getting one strategy better, they can focus on that one. <br> Above Proficiency: <br> Students who excel in the lesson today will have the opportunity to go further in the next lesson to push themselves. This is the first time they will be seeing this concept in math, so even if they get it right away, they will still go through the lesson with the students to see all of the strategies. <br> Approaching/Emerging Proficiency: <br> Students will partake in the lesson and the discussion at the board. They will see how both of the strategies (visual and additive) are done for the problems. They will take the preassessment and finish some of the problems on their work pages. <br> Modalities/Learning Preferences: <br> Visual: Working on the pages at the board will help visual learners. They also might like the visual strategy of drawing out the boxes. There is also a poster explaining the strategies that will be placed in the room for visual learners. <br> Auditory: Hearing not only the teacher explain the problems, but also how their classmates are going through the process, will help auditory learners. They will all be explaining their "Math Talk" and learning process. <br> Kinesthetic and Tactile: Cubes and blocks will be available for these learners who wish to actually visualize and touch the manipulatives while they work on the problems. They will still be expected to draw the process out on paper though so the teacher can see that they know. |
| Classroom Management- (grouping(s), movement/transitions, etc.) Large Group: <br> - Active listeners <br> - Be respectful of others who are talking <br> Independent work: <br> - Voice level 0 <br> - Raise hands if there are questions <br> Transitions <br> - Eyes on me in three, two, one <br> - Fist raised | Behavior Expectations- (systems, strategies, procedures specific to the lesson, rules and expectations, etc.) <br> Large Group: <br> - Students are expected to be active listeners <br> - Students are required to participate in the discussion <br> - Students are required to be respectful of others who are talking <br> - Students are expected to not interrupt those who are solving at the board <br> Independent Work <br> - Students are expected to keep their voices off when working on individual work <br> - Students are expected to raise their hands silently if they have questions <br> Transitions: <br> - Students are expected to use a voice level 0-1 when transitioning from one activity to the next <br> - Students are expected to stop what they are doing and pay |


|  | attention when they are being called on |
| :---: | :---: |
| Minutes | Procedures |
|  | Set-up/Prep: |
|  | Engage: (opening activity/ anticipatory Set - access prior learning / stimulate interest /generate questions, etc.) <br> "Today we are going to be working on multiplying fractions by whole numbers. To begin with, we are going to work on a pre-test to test our knowledge." <br> "You will not be graded on this, but I still want you to try your best. You may draw out models if that helps you best, but no matter what, please show your work." <br> "Your answers do not need to be in mixed fraction form, but you can do this by simplifying as best as possible, if you wish." <br> "This should be done on your own, and turned in when you are done please." <br> " Once you have turned in your pre-test, please take out your Math workbooks and wait quietly for everyone else to finish." |
|  | Explain: (concepts, procedures, vocabulary, etc.) <br> "How did you feel after finishing your pre-assessment? Where you at the point of frustration? Or were you relaxed because you knew we would cover what you did not understand later?" <br> "Pre-assessments like that can help us as teachers to know what you already know, and to see what we should teach you next, or go over again. We want to give you the best learning possible, and see what we can do to help you in the best way, so thank you for being understanding and trying your best so that I can help you in the best way that I can!" <br> After students have turned in their pre-tests and taken out their math workbooks, continue with the lesson. <br> Put up activity 1 on the Active Board to go over together. <br> "What representation can we make for this problem?" ( 5 jumps of $1 / 4$, rectangle representation) Discuss $1 \frac{1}{4}$ and $5 / 4$ and how they are equivalent but only one is written as a mixed fraction and simplified. <br> Discuss how multiplying fractions by whole numbers is additive, so equations for this problem can be $5 \times 1 / 4$, or $1 / 4+1 / 4+1 / 4+1 / 4+1 / 4$. <br> "What equation would we write if Janet ran around the track 7 times?" <br> "We often think about groups and the number in each group or the size of the group when we think about multiplication problems. In this problem, which number is the number of groups?" <br> " Which number is the size of each group?" 5 is the number of groups and $1 / 4$ is the size of the group. <br> Ask for student volunteers to come up and explain their process for solving a few of the problems. Allow for more than one on each problem so that everyone can discuss and observe how there are multiple ways to visualize the problem. <br> "Notice students, how student A drew out boxes and shaded them in, to visualize his problem, while student B added the fractions and visualized it this way." <br> Show poster and how representations in multiplying fractions can be done. Then work on number 1 and possibly number 2 on page 421 in student workbook. |
|  | Explore: (independent, concreate practice/application with relevant learning task -connections from content to real-life experiences, reflective questions- probing or clarifying questions) <br> "Now students, you will complete the rest of the problems on pages 421 and 422. ." <br> "Make sure you are showing your work, and don't forget any labels!" <br> "If you are needing more help, both Mrs. Mock, and myself will be at two different tables to work in small groups with you. If you feel you are a person that needs more help or clarifying at this point, please come and see one of us." <br> "Once you are done, you may work on your DreamBox quietly by yourself." <br> "Tomorrow we will be breaking down into small groups to work further on this during Math class." |
|  | Review (wrap up and transition to next activity): <br> Based off Pre-assessment and work done during this first class, we will divide students into small groups by who needs more help, who needs some help, and who needs to be pushed further. <br> We will gather some aids and specialists that come in during this time to also help with the small groups. After this lesson, students will take their CFA or post-assessment, which covers the entire chapter. |

Formative Assessment: (linked to objectives)
Progress monitoring throughout lesson- clarifying questions, checkin strategies, etc.
The formative assessments for this lesson include the pre-assessment, work turned in at the end of class, and the progress monitoring throughout. "By a show of thumbs, by a show of 5, etc."

Summative Assessment (linked back to objectives)
End of lesson:
The summative assessment will be done after 3 lessons, the final test, which covers the chapter of multiplying fractions by a whole number.

If applicable- overall unit, chapter, concept, etc.:

## Lesson Plan Template

Consideration for Back-up Plan:

Reflection (What went well? What did the students learn? How do you know? What changes would you make?):

