Lesson Plan Template

Grade: Fourth Grade

Subject: Math

Materials:

- Question Envelopes
- Notebook paper

Technology Needed:

Instructional Strategies:

- ☐ Direct instruction
- ☐ Guided practice
- ☐ Socratic Seminar
- ☐ Learning Centers
- ☐ Lecture
- ☐ Technology integration
- ☐ Other (list)
- ☐ Peer teaching/collaboration/ cooperative learning
- ☐ Visuals/Graphic organizers
- ☐ PBL
- ☐ Discussion/Debate
- ☐ Modeling

Guided Practices and Concrete Application:

- ☐ Large group activity
- ☐ Independent activity
- ☐ Pairing/collaboration
- ☐ Simulations/Scenarios
- ☐ Other (list)
- ☐ Hands-on
- ☐ Technology integration
- ☐ Imitation/Repeat/Mimic

Explain:
Students will be split up into groups of four or five based on a mix of skill levels. We will discuss as a group what the best solution is to each question.
Students will then move to an independent activity where they will be asked to come up with their own question to write about.

Standard(s)
4.OA.1 Interpret a multiplication equation as a comparison. Represent verbal statements of a multiplicative comparisons as multiplication equations.
4.OA.3 Solve multistep word problems posed with whole numbers and having whole number answers using the four operations, including problems in which remainders must be interpreted.

Objective(s)
Students will practice solving word problems that involve multiplication before creating their own multiplication word problem by the end of the lesson.

Bloom's Taxonomy Cognitive Level: Analyzing, applying, creating

Differentiation

Below Proficiency:
These students will benefit by discussing with their groups how everyone would solve the world problems. This will allow them to be learning from their group members to fully understand the methods to solve the solution. I will be walking around the classroom to monitor student progress and help with any of their questions.

Above Proficiency:
These students will be expected to lead their groups through the problem envelops. If there is time near the end of the lesson, I will challenge these students to write their own multiplication word problem that they would right on their own problem envelopes,

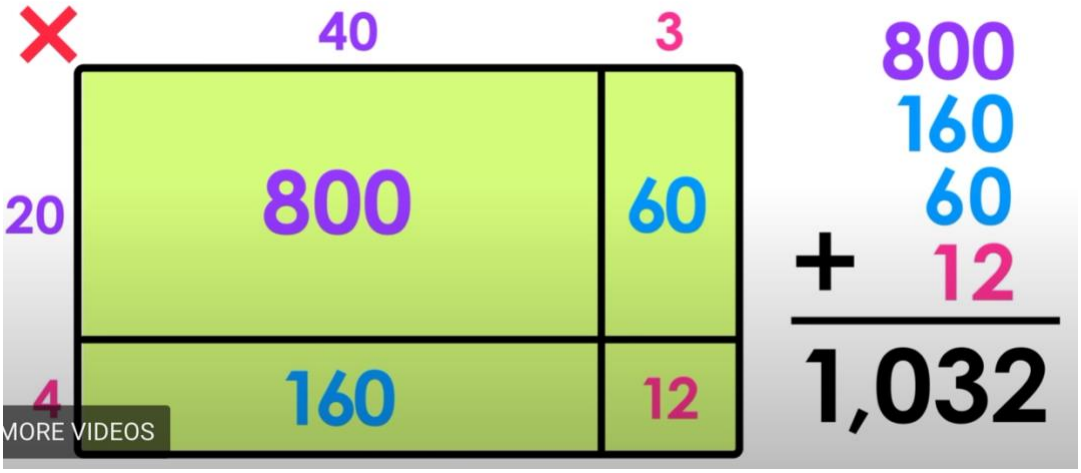
Approaching/Emerging Proficiency:
I will challenge these students to work individually on the word problems before discussing with their group members what methods were used and the solution that they found.

Modalities/Learning Preferences:
Kinesthetic: If I were to teach this lesson in a non-covid time, I would have the students move from each envelope to the next instead of passing the envelope to the next group.
Visual: These students will benefit from having the example of the area model and the partial products on the board. They will be able to use this example to help them get through their own word problems if they start to struggle.
Auditory: By talking out the example on the board as a whole class, auditory students will benefit from having the conversation about the example problem. These students will also benefit by having the group discussion about the problem to check their solutions and methods.
Tactile: Students will benefit by solving the problem on their own. This way, they will physically be able to solve the problem on their own.

Classroom Management- (grouping(s), movement/transitions, etc.)
Group Discussion- During group discussion, if students are not called on, they are expected to be at voice level 0. If I need to regain the student's attention, I will use the clapping sequence Ms. Meier has worked on with them and wait for them to clap back the response. I will repeat this until I have the full classes attention. I will also be using the microphone around my neck to make sure students can

Behavior Expectations- (systems, strategies, procedures specific to the lesson, rules and expectations, etc.)
Group Discussion- Students are expected to be active listening during group discussion. Voice levels should be at 0. Students should be focusing on "SLANT" sitting up straight, listening to the speaker, asking questions, nodding their heads, and tracking the speaker. Students are also expected to raise their hands if they have questions.

hear my voice. If I notice that students are distracted, I will use the attention getter "Eyes on me" to regain the student's focus. **Turn and Talk-** Students will be expected to turn and talk with a person sitting near them. They will be at voice level 1 during this time. I will also walk around the room and monitor the discussion to make sure students are on task. **Group Work-** For group work, we will group the students together in groups that they will work well and succeed in. Students will be expected to be at no louder than a voice level 2 during this time. **Individual Work-** students will go back to their assigned spots during this time.	**Group Work**- If they have questions during this time, they are expected to raise their hands. Student discussion should stay focused on the problem envelope activity. **Individual Work-** Student noise level will be at a level 1 during this time. They are expected to work individually and not distract the students sitting near them.

Minutes	Procedures
	Set-up/Prep: 1. Create the envelops for the questions. 2. Review the different methods of how to solve the problems. 3. Cut enough paper for student solutions to be written on.
	Engage: (opening activity/ anticipatory Set – access prior learning / stimulate interest /generate questions, etc.) 1. Pull up/Write a math problem on the white board. "A grocery store owner ordered 43 boxes of donuts to sell in her bakery section. There are 24 donuts in each box. How many donuts will she receive in total?" Answer: 1032 donuts "Think in your head how you would find the solution to this problem. Would you use partial products or an area model?" wait 15 seconds. 2. "Turn and talk with a partner sitting next to you to compare how you would solve this problem. Take out one piece of paper to use while you solve this problem. I will give you about a minute to discuss, and then we will discuss it as a class" 3. Allow partners time to discuss. Walk around and listen to student discussion to make sure students are actively participating. 4. Gather attention back to the front of the room by using the clapping sequence. Wait until you have all eyes back on you to continue talking. If students are still discussing, remind them that you will not start until all eyes are at the front of the room and voices are off. *Clapping sequence* "Ok friends, now that you had some time to think with a partner, I need your attention back at the front of the room" 5. "I will wait till I have all eyes on me before we move on" Once students have voices off, continue the discussion. 6. "Does anyone want to talk about what they discussed with their partner? How did find the solution to this problem?" 7. Call on one student to share, if they were correct in their answer, have them come up to the front of the room to show how they found the solution. 8. Allow student to show their work on the board. Ask the class "How many of you agree with ____'s solution? Give me a thumbs up if you got the same answer!" 9. "Would anyone be able to show the class how to solve this problem using partial products?" 10. Check for student understanding by seeing how many of them also found the right answer. If majority of the class did not, walk through the problem together.  43 x 24 800 60 160 12 1032

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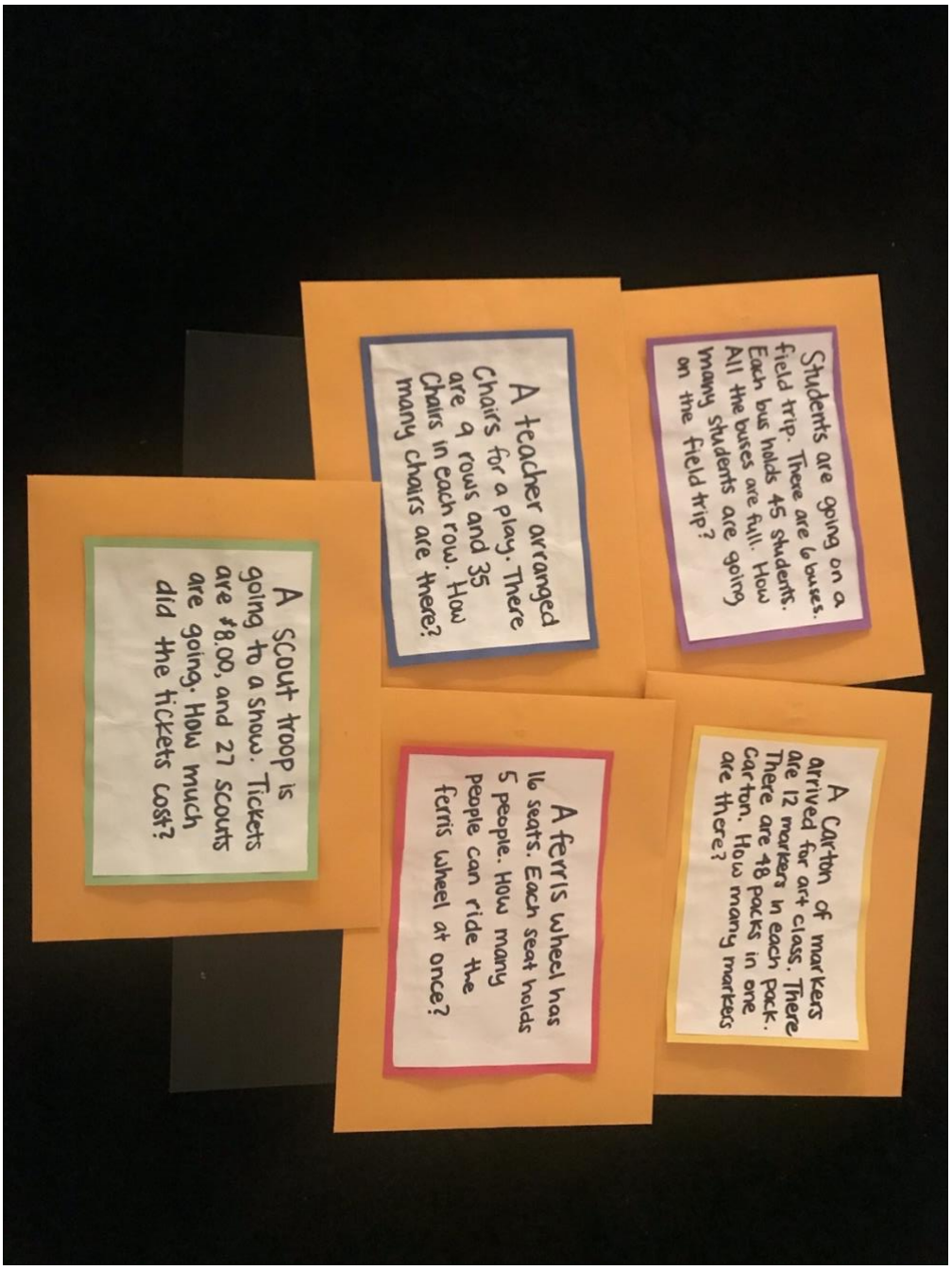
	11. Move onto the activity part of the lesson.
	Explain: (concepts, procedures, vocabulary, etc.) 1. "Today we are going to do an activity called Pass the Problem" I have four envelopes here that have four different problems on them. Ms. Meier and I are going to spilt you up into four different groups. Each group is going to get one of these envelopes." 2. Split up the class into two groups of four and two groups of five. 3. Hand one envelope to each group, making sure that the groups with five get an envelope labeled for five and groups with four get the envelopes labeled for four. 4. "When you get your envelope, I want one person in each group to take the paper inside out. Each member of the group needs four pieces of paper. Take some time now to split the paper up in your group." 5. "Using one piece of your paper and your pencil, solve the multiplication problem on the envelope individually." "I want you all to try to solve the problem using whatever method is easiest for you. Raise your hand if you need any help"
	Explore: (independent, concreate practice/application with relevant **learning task -connections from content to real-life experiences, reflective questions- probing or clarifying questions)** 1. Give the students two minutes to work on the problem alone. After they have had some time to solve, have them discuss in their groups what methods they used to find the solution and what the solution was. Get attention back to the front of the room if necessary, using the clapping sequence. Once all the students have stopped what they are doing tell them "It is now time to discuss with your group members what you did to solve the problem and what solution you found" 2. Give students a minute to discuss. 3. After students have discussed, tell them the next step. "Once you have had a chance to talk about the solution you have found, I want you to put the piece of paper with your work and your solution back into the envelope. You should still have three pieces of paper left" 4. "After your solutions are in the envelope, one person in your group can pass the envelope to the right" 5. Have the students pass the problem envelope to the next group. 6. When students have their new envelope tell them the next step. "Using one of the three pieces of paper you have left, look at the new problem on the envelope and try to solve it individually" "You will have some time for discussion in two minutes" 7. And repeat steps Walk around and monitor student discussion. See how students are working with their group and make sure that everyone in the group is participating. 8. If a group finishes theirs early, show them the extra problem envelope and try to have them solve it while they wait for their new envelope.
	Review (wrap up and transition to next activity): 1. When groups have had a chance to solve all four of the problem envelopes, they should not have any paper left. Gather all of the problem envelopes back. "I need one person from each group to place the problem envelope on the black chair by the smart board" 2. If there is still time, have the students write their own multiplication word problem as a wrap up activity using one of the extra pieces of paper. 3. Hand out the extra pieces of paper, one per student. "On this, I want you to write one multiplication word problem. You should write your name on this, but you do not need to solve it" 4. "Try to write a word problem similar to one of the ones we were just working with" 5. Give students the remaining time to write their word problems.

Formative Assessment: (linked to objectives) **Progress monitoring throughout lesson- clarifying questions, check-in strategies, etc.** Students will turn in their solutions in the problem envelopes. I can check these to see student progress with multiplication. **Consideration for Back-up Plan:** I have an extra envelope prepared incases students are finishing their word problems faster than other groups. I will hand this out to give students extra practice. I also have extra paper prepared.	**Summative Assessment (linked back to objectives)** **End of lesson:** At the end of the lesson students will be asked to write their own word problem that demonstrates an understanding of multiplication and unknown variables. **If applicable- overall unit, chapter, concept, etc.:** After the unit on multiplication, students will take a celebration to show what they know. The celebration will ask the students to write two word problems. Each question will provide the students will an equation which they will then write the word problem for.

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

This lesson idea was so much fun. When the students were participating in this lesson, they really began to discuss. I appreciated their discussion because it was math focused and allowed all of the students to get involved in the lesson. This also led into a good conversation I had with Ms. Meier about the importance of focused discussion. Overall, this lesson went very well with the students however, there were a few things I would change if I had the opportunity to teach it again. While I was teaching, I realized that I should have given the students all the instructions that they needed to succeed before handing out the envelopes. I need to be clearer with my expectations in order to

keep the student's attention throughout the lesson. Another thing that would help to show clear expectations would be to use a timer with the students. If I taught this lesson again, I would use the timer to give the students a set amount of time to work on the problem individually. Based off of how long it took this group of students to complete each problem, I would give them about a minute to attempt to solve the problem individually. After the timer would go off, I would then give them another timer set to two minutes. These two minutes would be used for the group discussion about the problem. During this time, students would be able to revise their work if they needed to make any corrections. I also think the timers would have been beneficial for keeping all students on track. One thing that I was not anticipating was the groups not being able to work through all of the problem envelopes. I was glad that I had an extra envelop available to give to groups that had finished their work early. By having extra, I was able to keep the lesson running smoothly by limiting outside distractions. Throughout the lesson, I think that I improved on getting all of the student's attention back to the front of the room before moving on or passing the envelops. This was something that I struggled with in other lessons I had taught with this group as they are very active and chatty. They responded well to the attention getting phrases "if you can hear me then _____" for example "If you can hear me clap once!" and then they clap their response. I would repeat this attention phrase until I had all eyes on me at the front of the classroom.



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