

Grade: Fourth		Subject: Math	
Materials: Projector, white boards, dry erase markers, tissue, paper and pencil		Technology Needed: Projector to display a hundred chart	
Instructional Strategies: <ul style="list-style-type: none"> 🍎 Direct instruction 🍎 Guided practice 🍎 Socratic Seminar 🍎 Learning Centers 🍎 Lecture 🍎 Technology integration 🍎 Other (list) <ul style="list-style-type: none"> 🍎 Peer teaching/collaboration/cooperative learning 🍎 Visuals/Graphic organizers 🍎 PBL 🍎 Discussion/Debate 🍎 Modeling 		Guided Practices and Concrete Application: <ul style="list-style-type: none"> 🍎 Large group activity 🍎 Independent activity 🍎 Pairing/collaboration 🍎 Simulations/Scenarios 🍎 Other (list) <p>Explain:</p> <ul style="list-style-type: none"> 🍎 Hands-on 🍎 Technology integration 🍎 Imitation/Repeat/Mimic 	
Standard(s) 4.OA.1 Interpret a multiplication equation as a comparison. Represent verbal statements of multiplicative comparisons as multiplication equations.		Differentiation <p>Below Proficiency: Students below proficiency will be able to ask questions while doing the activity along with use the hundred chart for help and choose to make a simple equation.</p> <p>Above Proficiency: Students above proficiency can challenge themselves by creating a challenging equation for themselves to solve.</p> <p>Approaching/Emerging Proficiency: Students approaching proficiency will follow along as I explain and work on their own to solve the problem.</p> <p>Modalities/Learning Preferences: Visual</p>	
Objective(s) By the end of the lesson, the students will be able to solve a multiplication equation by using the hundred chart to visualize that it is a comparison.			
Bloom's Taxonomy Cognitive Level: Apply			
Classroom Management- (grouping(s), movement/transitions, etc.) There are no transitions in this lesson, the students will remain at their desks during the lesson. The students will not touch their white boards or markers until instructed to do so. Once they have written their answer, they will place their white board face down at their desk and put the marker down until told to show their answers.		Behavior Expectations- (systems, strategies, procedures specific to the lesson, rules and expectations, etc.) The students will have a voice level 0 when I am explaining the lesson. Whispers will be allowed when the students are solving the equations if they need assistance. The students will raise their hands when they would like to give input.	
Minutes	Procedures		
3	Set-up/Prep: Project a hundred chart on the board and pass out white boards to each student, along with a dry erase marker and a tissue to erase. I will also have the students grab their math notebooks and a pencil.		

2	<p>Engage: (opening activity/ anticipatory Set - access prior learning / stimulate interest /generate questions, etc.)</p> <p>I will ask the students what 4 multiplied by 5 is and allow them to raise their hands to answer the question. I will then ask what 5 multiplied by 4 is and allow them to raise their hands to answer the question.</p>
3	<p>Explain: (concepts, procedures, vocabulary, etc.)</p> <p>I will direct the students' attention to the hundred chart projected on the board and circle 5 groups of four and draw a line at 20 so they are able to see the answer. I will then grab a different color marker and circle 4 groups of five so the students are able to see that they equal the same number. I will then explain that I will write an equation on the board and I want the students to independently answer the question and write their answer on their white board. I will encourage them to use the hundred chart for reference to help them come up with the correct answer.</p>
10	<p>Explore: (independent, concrete practice/application with relevant learning task - connections from content to real-life experiences, reflective questions- probing or clarifying questions)</p> <p>I will write 8×6 on the board and give the students some time to figure out the answer, when they are finished I will have them place their boards face down on their desk and set their marker down so I am able to see when everyone is finished. At this time I will be walking around the room to help the students who may be confused and need assistance reaching the correct answer. When everyone is finished I will ask them to hold up their boards so I can see their answers. I will then ask one student to share how they came up with that answer and review that strategy with the rest of the class. I will then have one students come to the board and circle groups of 8 6 times so they are able to visualize the correct answer. I will ask another student to grab a different color marker and circle 6 groups of 8 so they can see that they equal the same answer. I will repeat this with the following equations: 7×4, 9×5, 3×5, 10×2, 8×7</p>
5	<p>Review (wrap up and transition to next activity):</p> <p>I will have the students write their own equation on a piece of paper and illustrate how they found the answer. This can be done by drawing circles and grouping them to visualize their answer. I will then give a few students the opportunity to come up to the board and show their equation and use the hundred chart to demonstrate how they reached their answer. At the end of the lesson I will collect their equations that they solved and illustrated.</p>
<p>Formative Assessment: (linked to objectives)</p> <p>Progress monitoring throughout lesson-clarifying questions, check-in strategies, etc.</p> <p>During the lesson I will walk around the room and take note of the students who understand the concept. At the end of the lesson, I will collect the paper with the students' equation on it so I am able to see progress.</p> <p>Consideration for Back-up Plan:</p> <p>If the students are struggling to understand the</p>	<p>Summative Assessment (linked back to objectives)</p> <p>End of lesson:</p> <p>By the end of the lesson, the students should be able to understand a multiplication equation as a comparison.</p> <p>If applicable- overall unit, chapter, concept, etc.:</p>

concept, I will do each problem with them on the board and walk then through each thought process.

Reflection (What went well? What did the students learn? How do you know? What changes would you make?): I am very satisfied with how this lesson went. I ended up having a student telling me the strategy they used each time and having another student come up to the board to group the numbers. If I were to do this lesson again, I would have the students, as a group, count out the numbers as another student underlines them. This would keep the students engaged the entire lesson as I feel I was losing them towards the end of the lesson when one student was underlining the groups of numbers. As I did the lesson I was happy to see that the students were showing their work on the white board and consistently coming up with the correct answer. During the lesson I was very clear about my expectations and reminded them of how I want the white boards used and what I want them to do when they were finished with each problem. The students were excited about the lesson and learned from it. As I taught the lesson, I added some things to keep the students engaged such as allowing them to share their strategies and group the numbers. Overall, I feel that this lesson went very well and I would do it again.