

Math 2-step story problems

Grade: 3rd		Subject: Mathamatics
Materials: task cards, answer cards, whiteboards		Technology Needed: None
Instructional Strategies: <input type="checkbox"/> Direct instruction <input type="checkbox"/> Peer teaching/collaboration/cooperative learning <input type="checkbox"/> Guided practice <input type="checkbox"/> Visuals/Graphic organizers <input type="checkbox"/> Socratic Seminar <input type="checkbox"/> PBL <input type="checkbox"/> Learning Centers <input type="checkbox"/> Discussion/Debate <input type="checkbox"/> Lecture <input type="checkbox"/> Modeling <input type="checkbox"/> Technology integration <input type="checkbox"/> Other (list)		Guided Practices and Concrete Application: <input type="checkbox"/> Large group activity <input type="checkbox"/> Hands-on <input type="checkbox"/> Independent activity <input type="checkbox"/> Technology integration <input type="checkbox"/> Pairing/collaboration <input type="checkbox"/> Imitation/Repeat/Mimic <input type="checkbox"/> Simulations/Scenarios <input type="checkbox"/> Other (list) Explain:
Standard(s) 3.OA.8 Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity.		Differentiation Below Proficiency: Have students complete less complex story problems starting with addition and subtraction. Only use one operation for both steps. Above Proficiency: Have students complete more complex story problems/extra story problems. Use multiple operations including multiplication and division. Approaching/Emerging Proficiency: Have student complete story problems using different operations for each step. Modalities/Learning Preferences:
Objective(s) By the end of the lesson the student will be able to solve two-step word problems by finding key information in the problem. Bloom's Taxonomy Cognitive Level: apply		
Classroom Management- (grouping(s), movement/transitions, etc.) Students will be working together as a class for the beginning of the lesson. Students will be at their desk. When transitioning from group work to independent work, students will keep a quiet voice and stay on task.		
		Behavior Expectations- (systems, strategies, procedures specific to the lesson, rules and expectations, etc.) Students will be expected to have a level 1 voice during work time. Students will be expected to complete their problems and quietly bring their sheets to the teacher. Students will take turns writing their words on the board to complete the phrase.
Minutes	Procedures	
5	Set-up/Prep: <ul style="list-style-type: none"> • Have task cards ready • Have story problems on the board • Have small whiteboards ready for the students 	
3	Engage: (opening activity/ anticipatory Set – access prior learning / stimulate interest /generate questions, etc.) <ul style="list-style-type: none"> • Ask the students what a story problem is, give time for the students to answer • Explain that a story problem is a written math problem that we have to solve • Explain to the students what a 2 step story problem is, “A 2 step story problem is when we must solve two math equations to get the answer to our problem.” 	
10	Explain: (concepts, procedures, vocabulary, etc.) <ul style="list-style-type: none"> • Have students get out their whiteboards and markers • Go over the first story problem together on the board, explain to the students that they must circle the important numbers in the story problem, and underline the question that is being asked in the problem. Now the students must find what operation they are using to solve the problems. It helps to box these key words • Have the students write the equations on their whiteboard and once they are complete to show their whiteboard • Have the students solve their equations on their whiteboard • Answer the story problem together as a class • Do this for the second story problem (together as a class) • Explain to the students that they will be working on their own story problems independently • Each student will get 2 task cards with a story problem on it and a blank space to show their work 	
15	Explore: (independent, concrete practice/application with relevant learning task -connections from content to real-life experiences, reflective questions- probing or clarifying questions) <ul style="list-style-type: none"> • Students will independently solve their math problems • Each student will solve their story problems and once they are completed they will hand in their work to get their words to place on the board to finish a phrase • On the board will be spaces for the students to write in their words that correspond with the number on their story problem 	

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	<ul style="list-style-type: none"> The class will work together to finish the phrase 	
2	Review (wrap up and transition to next activity): <ul style="list-style-type: none"> Go over the completed phrase as a class Talk about if we see story problems in places other than math 	
Formative Assessment: (linked to objectives, during learning) <ul style="list-style-type: none"> Progress monitoring throughout lesson (how can you document your student's learning?) <p>Walk around and observe students as they complete their math problems, Ask... why they used the operation they did, what numbers did the story problem ask you to use?</p>	Summative Assessment (linked back to objectives, END of learning) <p>Look back on the students work handed in and observe their answers and work/problem solving</p>	
Reflection (What went well? What did the students learn? How do you know? What changes would you make?): <p>WHAT WENT WELL: There was a great start by having students talk in their learning centers about what a story problem is. This engaged them in the lesson and had them interested. I also think doing the story problems on their board together as a class helped gain an understanding of 2-step story problems. The students were engaged in the lesson and excited to find out the hidden phrase on the board. Having the students complete a phrase helped get students to complete their story problems where normally they might just be sidetracked and not do the work. I also feel that the student help went very well. When students started to finish their problems they started to help other students around the classroom who were trying to complete their problems and had questions.</p> <p>CHANGES: Things I would change would be the amount of problems given to the students. I would have them start with 1 and may get another once they have finished the first. I would also change the story problems to be addition and subtraction for the first independent one. This would help students grasp the concept of 2-steps. The students seemed to struggle with the higher level thinking problems that include multiplication and division. I should have also labeled the spots where students turn in their work, pick up words to write on the board. This would have brought down the times students interrupted me while I was working with other students. I would also need to work on classroom management by having students have quiet voices while working independently. My practicum teacher gave great ideas on changing the lesson by making the problems easier. Together we sat down and wrote out problems.</p> <p>Overall, the students enjoyed the lesson and were excited to solve the phrase as they finished their math problems.</p>		