

Lesson Plan Template

Date: 9/27/2019

Subtraction – using math manipulative blocks

Grade: 1st		Subject: Mathematics	
Materials: math manipulatives (counting blocks), sheet with math problems, notecards for exit slips		Technology Needed: Promethean Board	
Instructional Strategies: <input type="checkbox"/> Direct instruction <input type="checkbox"/> Guided practice <input type="checkbox"/> Socratic Seminar <input type="checkbox"/> Learning Centers <input type="checkbox"/> Lecture <input type="checkbox"/> Technology integration <input type="checkbox"/> Other (list) <input type="checkbox"/> Peer teaching/collaboration/cooperative learning <input type="checkbox"/> Visuals/Graphic organizers <input type="checkbox"/> PBL <input type="checkbox"/> Discussion/Debate <input type="checkbox"/> Modeling		Guided Practices and Concrete Application: <input type="checkbox"/> Large group activity <input type="checkbox"/> Independent activity <input type="checkbox"/> Pairing/collaboration <input type="checkbox"/> Simulations/Scenarios <input type="checkbox"/> Other (list) Explain: <input type="checkbox"/> Hands-on <input type="checkbox"/> Technology integration <input type="checkbox"/> Imitation/Repeat/Mimic	
Standard(s) 1.OA.6- Use strategies to add and subtract within 20. Fluently add and subtract within 10.		Differentiation Below Proficiency: - To differentiate for these students, the teacher will have parts of the equations filled out for them. Also, the counting blocks will help these students to visually see/understand the subtraction that is taking place. Above Proficiency: - If these students complete the exit slip provided, they could be encouraged to come up with and write their own subtraction equations all on their own. Approaching/Emerging Proficiency: - These students will be challenged simply by subtracting. This is a relatively new subject for them, so this activity should be at their level. Modalities/Learning Preferences: <ul style="list-style-type: none"> Visual: students will be able to use the counting blocks to visualize how many are being subtracted and what that would make the difference/total be after subtraction. Auditory: students will be encouraged to count out-loud/to themselves to help them figure out the answer to the subtraction equation. Kinesthetic: students will benefit from being able to use the blocks to count. Tactile: students will benefit from being able to use the counting blocks to help them solve the subtraction equation. 	
Objective(s) - By the end of the lesson, students will subtract within 10 using counting blocks to help them solve the equations. Bloom's Taxonomy Cognitive Level: Knowledge, Comprehension, Application			
Classroom Management- (grouping(s), movement/transitions, etc.) - Students will join me at the carpet for the explain section. - When students work on the explore section by themselves, they will be sitting at their desks. They will be allowed to work independently and ask questions to their peers if need be.		Behavior Expectations- (systems, strategies, procedures specific to the lesson, rules and expectations, etc.) - The students will keep their voice levels down when working on their math problems. - The students are expected to use their math manipulatives as tools NOT toys. If they are building with their counting blocks, they will not get to use them to help with their math. - The students are expected to raise their hand if they have a question/comment/answering a question from the teacher.	
Minutes	Procedures		
5 min.	Set-up/Prep: - Create sheet students will be writing on during "explore" time. -		
2 min.	Engage: (opening activity/ anticipatory Set – access prior learning / stimulate interest /generate questions, etc.) - Have the students sit on the carpet; the students will each get 3-4 chocolate chips. - The students need to hold onto the chocolate chips until they are told what to do with them. - Once every student has chocolate chips, make a subtraction problem. <ul style="list-style-type: none"> "We have 4 chocolate chips each; if we eat 2 chocolate chips, how many do we have left?" Once the students have answered, tell them: "You just made a subtraction problem!" Write the subtraction problem on the board for the students to see. 		

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7-8 min.	Explain: (concepts, procedures, vocabulary, etc.) <ul style="list-style-type: none"> - Subtracting means “<u>taking away.</u>” Just like when we ate the chocolate chips, we took them away and were left with the <u>difference!</u> - We show subtraction by using a – sign. Just like when we add we use a + sign, a – is used for subtraction problems. - So, if subtraction means “to take away” Let’s do a problem together. - If we have 6 blocks and we take 3 away, how many are left? - How about if we have 7 blocks and we take away 6 blocks? 	
10-12 min.	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"> - Using the counting blocks (math manipulatives), the students will solve the problems given to them. - They can work independently – or with help from their peers if they need it. 	
5 min.	Review (wrap up and transition to next activity): <ul style="list-style-type: none"> - When most of the students are done, the teacher can wrap up the activity by going over a few of the problems that were assigned by the students. - Have the students do the problems together using their counting blocks. - One student will be called up to the Promethean Board to answer the question. - What did you learn about subtracting? What does it mean to subtract again? 	
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?) <ul style="list-style-type: none"> - The teacher will be able to monitor by walking around the room while students work on problems during the “Explore” section, using their counting block manipulatives. The teacher will be able to check and see which students are understanding the content and which students are struggling so the teacher can assist during this time and explain further as well. 	Summative Assessment (linked back to objectives, END of learning) <ul style="list-style-type: none"> - Each student will be given a “special problem” that is different from their peers around them. Each student will be responsible to answer their problem. This will allow the teacher to determine if the student understands the concept of subtraction. 	
Reflection (What went well? What did the students learn? How do you know? What changes would you make?): <p>Overall, I think this was one of my most successful lessons so far in both of my practicum experiences. The students were extremely engaged even though this was a relatively new concept they were learning (subtraction). The first graders had just been introduced to subtraction, so this was their second time hearing the term – but they had yet to hear it as the concept of “taking away” something. So, my initial engagement piece by giving the students chocolate chips and having them eat some of them to show they made a subtraction problem really excited them. While it was exciting to them, I would definitely change the chocolate chips to skittles to avoid melting chocolate! Because I introduced subtraction to them as this idea of “taking away” chocolate chips, this made the entire lesson take off.</p> <p>Something that I noticed throughout this week of practicum is the amount of independent work 1st graders can have compared to 4th graders. I allowed more time for exploring to my fourth graders last semester because they could stay on task much longer than first graders. I found walking around the room was crucial during explore time because my first graders needed help and I could redirect them if they were simply playing with the math manipulatives instead of using them as tools. Because I did this, I could tell how much longer we should do the explore activity as well as who was struggling with the lesson and which students understood it completely. I learned from this assignment that about 10 minutes was the right amount of time for students to practice the content before getting sidetracked.</p> <p>When students were done, I had them work with a partner to create their own subtraction problems we could share with the class. While the students were eager to do this, in the future, I probably would come up with another activity the students who finish early could do so that I don’t have to keep repeating myself on what they should be doing once they are finished.</p> <p>After talking with Mr. Conlon, I realized I probably should have used more academic terminology during my teaching of the lesson. I kept referring to subtraction as “taking away” instead of introducing “minus” and “equals.” These are terms my first graders are going to have to know – so introducing them and using them while teaching a lesson is super important. While I did use the terms once or twice during the lesson, if I were to change the lesson, I would continue to repeat, repeat, repeat the word and ask the students to tell me what the terms mean so they begin to understand the terminology for subtraction.</p> <p>Having the “special problems” for the students to do definitely helped me to see who understood the subtraction lesson and who did not. I would continue to use the math manipulative blocks. Overall, I am very happy with the turnout of this lesson – although it was a new concept, the students seemed to grasp the concept and will continue to grow off of this lesson.</p>		

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** Practice worksheet will be submitted with the lesson plan.