Name: Date:

Number String Protocol Checklist

Things to do every number string

Did I do these things?	Yes	No
Step 1: Chose a purposeful string of problems or images with specific mathematical goal(s).		
Step 2: Reminded students to use hand signals and sentence frames.		
Step 3: Posed first problem or image.		
• Got answer(s) from kids		
• Listened to students response and decided if clarification, elaboration or explanation was needed.		
• Requested a different strategy or asked students to comment on or build upon the current strategy.		
• Used other students' voices to explain mathematical thinking.		
• Recorded student's mathematical reasoning.		
• Represented problem with a particular math representation or model (number sentence if image; open number line, open arrays, money, open double number line, ratio table if a problem).		
Step 4: Posed second problem		
• Kept the problems of the string visible to the students as well as students strategies by using different colored markers.		
• Requested answer(s) from student(s).		
• Linked student's answer back to the representation or model. Requested that student describe how they got their answer.		
Step 5: Posed the remaining problems.		
• Posed each problem one at time and considered all steps from steps 3 and 4.		
• Note: If the last problem in the string is an application of the ideas that the string is designed to focus attention on, then explicitly told student you are posing a new problem by saying *Now I'm going to pose a new problem with different numbers. See if the work we've just done with _____idea helps you get the answer for this one.*		
Step 6: Highlighted the big ideas and closed the task.		
• Discussed the specific strategy that this task was designed to address. Worked with students to make connection among the problems within the string. Made explicit the mathematical strategy or concept that this string highlighted.		