

Writing a note to your Math Buddy

Your notes to your Math Buddy should have a general form:

Start Response with Praise & Prompts Personal Closing Signature

Friendly Start

(1 short paragraph)

Start notes to your Math Buddy with a greeting; use their name and a friendly opening sentence. Let them know you are going to give them something to do (the purpose of the letter). If they got the answer right you can say good job, but let them know you have questions or things you'd like them to work on. If they got the answer wrong, you can say something like "good start", "you are almost there" or "thanks for working on the problem" then let them know you have some ideas or hints for them that will help them get the right answer. This lets them know right away if they are wrong so they keep on reading.

Problem Solving Response

(1-2 short paragraphs *per problem* student attempted; 2-3 if they just did one problem)

Use the "Problem Solving Analysis" approach on the back of this paper to write notes to yourself about your buddy's work. This will help you figure out what you want to focus on. Prioritize your comments. For example, it is pointless to ask them to fix an arithmetic error when they don't understand the problem and their work will not lead them to the correct solution anyway. Include both Praise and Prompts in your letter.

Praise

What did your Math Buddy do that was good and we want to encourage them to continue? **Try to address their mathematics here, not just their handwriting or picture drawing.**

Prompts (Suggestions and/or Questions)

What will help them move forward? Refer to your scores to find the most important things to focus on. It is ok to refer to their scores, but always be positive and don't make that the main focus.

For both praise and prompts it may also be helpful to refer to the scoring categories words in your reply. For example, if they got below a 4 in a particular category tell them what you think they need to get a higher score (but avoid saying something like "If you do this, then you'll get a 4" – don't promise particular scores). Some examples:

1. You are close to getting a 4 on your reflecting and evaluating score. To raise that score I'd like to see you put the answer into a complete sentence and check your work in a different way.

2. Nice job showing all of your work. Your strategies worked and you showed all of the steps. To get more than a four in the representing and solving score you could enhance your solution by comparing the different strategies you used. For example, explain label your picture and explain how it is related to your number calculations. How does the box cut in half with the 12's in it relate to your number sentence $12 \times 2 = 24$?
3. I understand much of what you have done, but not all of it. To raise your communication and reasoning score, I'd really like to see you label all your numbers and explain why you did each step. Why did you choose to double the 12? Is that related to something you were told in the problem? Explaining step by step helps with communication.
4. Your answer is so very close but contains a small error. If you go back and check your calculations carefully and reread the problem you will probably avoid those small errors. This will help you get a 4 in the accuracy score.
5. You've done such a great job on this problem. To get more 5's and 6's consider adding some extra comments to the problem. For example how would your answer change if the fractions were $\frac{1}{2}$ and $\frac{1}{4}$ instead of $\frac{1}{2}$ and $\frac{1}{2}$? Is there a general way you could explain how to solve this problem if the number of candies left over were a number different than 12? Asking and answering new questions related to your problem is really advanced, but I think you are ready to do that!

Personal

If they sent you a note and asked questions, feel free to respond to them here. Possibly ask a few new, brief questions to keep the dialogue going.

Closing (1 short paragraph – 1 sentence is OK)

Close with an encouraging phrase. For example: "I am excited to read your continued work on the Points Keep Adding Up".

Signature

Sign your name

Problem Solving Analysis

- 1. Score each problem using the State Scoring Guide. Use the attached scoring sheet to help organize your thoughts. The teachers have requested that we not be too lenient!**
- 2. As you score make notes about each of the Dimensions (see ideas listed below).**

Making Sense of the Task

- Can you tell if they fully understand the mathematics and the problem?
- What does the student understand?
- What are the student's main problems?

Representing and Solving the Task

- Can you see if they used a strategy that relies on skill, not luck?
- If they used models, pictures, diagrams, and/or symbols, are they effective in helping find the solution and are they complete?

Communication and Reasoning

- Did they tell all of the important steps taken to solve the problem?
- Is there anything you're wondering about?
- Explains the steps that they do explain in such a way that another student would understand
- Is the solution clearly identified?

Accuracy

- Is the solution supported by the work?
- Did they make few mistakes of consequence?
- Did they use largely correct vocabulary?
- Did they use units correctly whenever they used units?

Reflecting & Evaluating

- Does the solution make sense in the context of the problem?
- Are the calculations and strategies reviewed and justify the solution?

- 3. Use your notes to create a list things the student did well (praise) and of questions and suggestions (prompt) for your own reference. Some ideas are listed below.**
 - Create a list of questions that might help the student to learn something past what s/he already knows.
 - If the student answer is wrong, write a few questions that will lead the student in the correct direction using their own strategy if possible.
 - If the student answer is correct, write a few questions that will help improve their explanation or extend their knowledge.
 - Be specific and clear! For example: "Please explain more" is not as useful as "Where did the 24 in your problem come from?" or "Is there a calculation you can show me to explain how you got 48?"