Name	Date	Period	
	Challenge of the week: How many ants are there?	Page 1 of 2	

In the children's song "The Ants Go Marching", the ants first march in a single file, but the little one stops to suck his thumb, and the ants march down to the ground to get out of the rain. After that, the ants change formation to 2 lines. The little one stops to tie his shoe, the ants march down the ground to get out of the rain. Then, the formation changes to 3 lines, and so on until there are 10 lines. It is always the same number of ants. So, what is the minimum number of ants that there could be in order for the lines to be exact every time (i.e., there are no extra ants that have no line or that would make one line longer than the others)? You can find the lyrics at <u>http://www.kidspot.com.au/Baby-Baby-play-&-toys-The-ants-go-marching-lyrics+5210+425+article.htm</u>, or watch a video at <u>http://www.youtube.com/watch?v=Pjw2A3QU8Qg</u>.

Step 1: Look

What do you notice and wonder about the information given? Complete the I notice/I wonder table below.

I notice	I wonder

Step 2: Think

1) In your own words, explain what you are being asked to do.

2) What kind of strategy(ies) can you use to find the answer? Circle or write your own.

Compute or Simplify	Use a Formula	Make a Model or Diagram
Make a Table, Chart or List	Guess, Check and Revise	Consider a Simpler Case
Eliminate Possibilities	Look for Patterns	Work Backwards
Unit Analysis	Algebra	

Step 3: Try it

Show any work that you perform to find the answer to your question here.

Step 4: Check

Did your work help you reach a conclusion? If so, what was/were your conclusion(s)? (You may write your conclusions as a list here.) If not, what can you do differently? Try and check again.

Step 5: Explain

Explain what you have been able to figure out. If you are stuck, explain up to that point and then try to ask a specific question for what you need help with. Write complete sentences. Remember to explain *why* each step was taken.

Step 6: Revisit

Have your partner read your explanation and write comments about it (Is there any clarification needed somewhere? What else can you do or say?).

Step 7: Finish

Write your final draft keeping your partner's comments and suggestions in mind. Pay close attention to including answers to: What did you do? How did you do it? Why did you do that? What is/are your final conclusion(s)?