THE ART OF QUESTIONING IN MATHEMATICS
From The NCTM Professional Teaching Standards

HELP STUDENTS WORK TOGETHER TO MAKE SENSE OF MATH
• “What do others think about what___________said?”
• “Do you agree? Disagree? Why or why not?”
• “Does anyone have the same answer but a different way to explain it?”
• “Would you ask the rest of the class that question?”
• “Do you understand what they are saying?”
• “Can you convince the rest of us that that makes sense?”

HELP STUDENTS TO Rely MORE ON THEMSELVES TO DETERMINE WHETHER SOMETHING IS MATHEMATICALLY CORRECT
• “Why do you think that?”
• “Why is that true?”
• “How did you reach that conclusion?”
• “Does that make sense?”
• “Can you make a model and show that?”

HELP STUDENTS TO LEARN TO REASON MATHEMATICALLY
• “Does that always work? Why or why not?”
• “Is that true for all cases? Explain?”
• “Can you think of a counter example?”
• “How could you prove that?”
• “What assumptions are you making?”

HELP STUDENTS LEARN TO ANALYZE, INVENT, AND SOLVE PROBLEMS
• “What would happen if ____________? What if not?”
• “Do you see a pattern? Explain?”
• “What are some possibilities here?”
• “Can you predict the next one? What about the last one?”
• “How did you think about the problem?”
• “What decision do you think he/she should make?”
• “What is alike and what is different about your method of solution and his/hers?”

HELP STUDENT CONNECT MATHEMATICAL IDEAS AND APPLICATIONS
• “How does this relate to ____________?”
• “What ideas that we have learned before were useful in solving this problem?”
• “Have we ever solved a problem like this one before?”
• “What uses of mathematics did you find in the newspaper last night?”
• “Can you give me an example of ____________?”