Standards for Mathematical Practice

As you discuss math with your son or daughter and/or help them with their homework tasks, you can help him or her develop skills with these Math Practice Standards by asking some of these questions.

1. **Make sense of problems and persevere in solving them.**
   * What is happening in this problem? Tell me in your own words.
   * How will you go about solving this problem? What is your plan?
   * What will your answer be (Yes or No, a person’s name, a number, etc.)?
   * What do you think a reasonable answer would be?
2. **Reason abstractly and quantitatively.**
   * What do the numbers in the problem represent (7 is number of tables, 21 is the number of chairs, etc.)?
   * Can you write an expression to help you solve the problem?
   * Can you use a variable to represent what you are trying to find out in the problem?
3. **Construct viable arguments and critique the reasoning of others.**
   * How do you know that your answer is correct? Use pictures, numbers, and or words to justify it to me.
   * If I told you the answer was (offer a wrong answer) how would you explain to me that I am wrong?
4. **Model with mathematics.**
   * How can math help us solve this problem?
   * When did you use Math today?
   * What does the number in your solution represent?
5. **Use appropriate tools strategically.**
   * Which tool is most appropriate to use to solve this problem? (Numberlines, graphs, planning charts, etc. are all tools.)
   * Why did you use the tool you did? Did it help you to be more accurate or efficient?
   * If you didn’t have that tool available how would you have solved the problem?
6. **Attend to precision.**
   * Is your answer close to your estimate?
   * Could you do the problem a second time, in a different way, to make sure your answer is correct?
   * Are you using the correct units (square inches, dollars, etc.)?
7. **Look for and make use of structure.**
   * What do you already know about the mathematics needed to solve problems like this?
   * What other problems have you solved in the past that might help you solve this problem?
8. **Look for and express regularity in repeated reasoning.**
   * What method might work every time you solve a problem like this?
   * Do you notice any patterns?
   * Could you make a rule or generalization about these types of problems?