Mathematical Practice Standards–3rd & 4th Grades

Questions to ask that stimulate students to become mathematically proficient:

1. **Make sense of problems and persevere in solving them.**
* How would you describe the problem in your own words?
* What do you know that is not stated in the problem?
* Could you try this with simpler numbers? Fewer numbers?
* Would it help to create a diagram? Make a table? Draw a picture?

2. **Reason abstractly and quantitatively.**
* What does it mean when?

3. **Construct viable arguments and critique the reasoning of others.**
* What do you think about what ___ said?
* Do you agree? Why or why not?
* Can you explain what ___ is saying?
* Can you explain why his/her strategy works?
* How is your strategy similar to ____'s strategy?
* Can you convince us that your answer makes sense?

4. **Model with mathematics.**
* What number sentence represents your drawing/picture/representation?
* How could you use symbols to represent what's happening?

5. **Use appropriate tools strategically.**
* How did using that tool or strategy help you solve the problem?
* If you didn't have that tool, what other one would you have chosen?

6. **Attend to precision.**
* Can you tell me why that is true?
* How did you reach your conclusion?
* How does your answer connect to the question? Does it make sense?
* Can you make a model to show that?
* Can you convince the rest of us that your answer makes sense?
* What new words did you use today? How did you use them?

7. **Look for and make use of structure. (Deductive Reasoning)**
* How do you know your rule/equation will always work?

8. **Look for and express regularity in repeated reasoning. (Inductive Reasoning)**
* Is there a shortcut/algorithm you could use?