What do the Common Core Math Practice Standards Look Like in Classrooms?

The Math Practice Standards will make learning feel different in the classroom. Students will work in groups and critique the reasoning of others as well as construct arguments for their way of solving problems. Students will be talking about math, using objects to represent math ideas, and breaking problems down into simpler concepts. Students will look for patterns rather than simply memorize solutions or algorithms. Sometimes they will be asked to find the answer using a calculator or by researching and applying their knowledge. It may feel different to them because they will be asked to persevere rather than be given answers after little struggle.

The 8 Common Core Mathematical Practice Standards sound like this in the classroom:

1. Make sense of problems and persevere in solving them
   - What exactly is this problem asking me to do?
   - How can I get that information?

2. Reason abstractly and quantitatively
   - I know I need to multiply, but what do these numbers represent?

3. Construct viable arguments and critique the reasoning of others
   - Can that really be right?
   - I think that step is wrong because...
   - It can’t be... a plane moves faster than 50 miles an hour!
   - I think it's this, what do you think?

4. Model with mathematics
   - Can I use math to represent this situation?
   - How can these cubes represent the whole?

5. Use appropriate tools strategically
   - Do I need my calculator for this?
   - Should I use a ruler or a yardstick?
   - Does my answer make sense?
   - What math skills do I already know that I can apply here?

6. Attend to precision
   - Do I need to round my answer?
   - What label should I use for this—inches squared or cubed?

7. Look for and make use of structure
   - Can I break this down into something simpler?
   - How can I rearrange these ideas to solve this problem?

8. Look for and express regularity in repeated reasoning
   - Is there a pattern in this problem I can use?
   - Have I seen this before?

Connecticut adopted these new standards in July of 2010 to ensure all students will be college and career ready when they graduate high school. State tests reflecting the new curriculum will commence in the spring of 2014.