What do the Standards for Mathematical Practice "look like/sound like?

SMP #	I SEE STUDENTS WHO:	I SEE TEACHERS WHO:
1. Make sense of problems and persevere in solving them	▪ Analyze information ▪ Formulate a plan ▪ Show patience ▪ Persist	▪ Pose rich, open-ended tasks ▪ Probe with questioning ▪ Foster "grit" and perseverance ▪ Foster a collaborative environment
2. Reason abstractly and quantitatively	▪ Relate real world quantities with mathematical notation ▪ Relate symbols, numbers, models, words and graphs	▪ Pose complex tasks ▪ Situate problems in real world contexts ▪ Move flexibly between concrete, visual and abstract representations
3. Construct viable arguments and critique the reasoning of others	▪ Listen for information ▪ Use mathematical evidence in discourse and explaining thinking ▪ Question others	▪ Foster a safe, collaborative environment ▪ Model discourse ▪ Facilitate discourse with minimal involvement
4. Model with mathematics	▪ Connect numbers and symbols ▪ Use representations (written and manipulative) to model ▪ Use technology efficiently and appropriately	▪ Pose real-world problems and tasks ▪ Foster use of mathematical models ▪ Provide and enable use of appropriate tools
5. Use appropriate tools strategically	▪ Identify relevant resources ▪ Use tools to explore and understand mathematics ▪ Articulate why they chose a tool	▪ Provide students with appropriate tools ▪ Support student use of tools to explore and understand mathematics
6. Attend to precision	▪ Use mathematical vocabulary ▪ Give thought to units and labels ▪ Calculate accurately and efficiently	▪ Give explicit instruction and expectations ▪ Use precise terminology at all times
7. Look for and make use of structure	▪ Use underlying mathematical concepts to detect structures or patterns ▪ Apply what they know about prior mathematics to generalize solutions	▪ Encourage students to step back and view problems holistically ▪ Elicit responses from multiple students to uncover mathematical structures
8. Look for and express regularity in repeated reasoning	▪ Articulate patterns and relationships ▪ Generalize mathematical relationships based on problem solving and discourse	▪ Allow students to formulate ideas based on observations and mathematical conjecture ▪ Pose problems and tasks that are not based solely on rules or procedures