Look-Fors in a Math Classroom

Look for these shifts within your mathematics classrooms:

#1 Learning Goals – Shift from “Stating a Standard” to “Communicating Learning Expectations”
- Goals are appropriate, challenging, and attainable.
- Goals are specific to the lesson and clear to students.
- Goals connect to other mathematics.
- Goals are revisited throughout the lesson.

#2 Tasks – Shift from “Routine Tasks” to “Reasoning Tasks”
- Uses engaging, high-cognitive-demand tasks with multiple solution pathways.
- Uses tasks that arise from home, community, and society.
- Uses how, why, and when questions to prompt students to reflect on their reasoning.

#3 Representations – Shift from “About Representations” to “Through Representations”
- Uses tasks that lend themselves to multiple representations.
- Selects representations that bring new mathematical insights.
- Gives students time to select, use, and compare representations.
- Connects representations to mathematics concepts.

#4 Mathematical Discourse – Shift from “Show and Tell” to “Share and Compare”
- Helps students share, listen, honor, and critique each other’s ideas.
- Helps students consider and discuss each other’s thinking.
- Strategically sequences and uses student responses to highlight mathematical ideas and language.

#5 Purposeful Questions – Shift from “Questions Seek Expected Answers” to “Questions Illuminate and Deepen Student Understanding”
- Questions make the mathematics visible.
- Questions solidify and extend student thinking.
- Questions elicit student comparison of ideas and strategies.
- Strategies are used to ensure every child is thinking of answers.

#6 Procedural Fluency – Shift from “Replicating Procedures” to “Seeking Efficient Strategies”
- Gives students time to think about different ways to approach a problem.
- Encourages students to use their own strategies and methods.
- Asks students to compare different methods.
- Asks why a strategy is a good choice.

#7 Productive Struggle – Shift from “Mathematics-made-easy” to “Mathematics-takes-time”
- Employs ample wait time.
- Talks about the value of making multiple attempts and persistence.
- Facilitates discussions on mathematical error(s), misconception(s), or struggle(s) and how to overcome them.

#8 Evidence of Student Thinking – Shift from “Valuing Correct Answers” to “Valuing Students’ Thinking”
- Identifies strategies or representations that are important to look for as evidence of student understanding.
- Makes just-in-time decisions based on observations, student responses to questions, and written work.
- Uses questions or prompts that probe, scaffold, or extend students’ understanding.