Can mathematics be an engaging endeavor worthy of academic pursuit? Can students be involved in meaningful learning experiences? Having observed many classrooms, it seems that the answers are a heartbreaking “No.” Reflect on what often happens in classrooms. Teachers may unwittingly communicate that mathematics is so mind numbing and senseless, that they must “jazz it up,” tricking students to engage in mathematical activity; hijack thinking by telling students what to know without allowing them opportunities to grapple with ideas; write notes while students passively copy. There is no expectation or opportunity to make sense, to reason, to understand, or to engage in authentic mathematical thinking and discovery. Reflect on what could happen in classrooms. Imagine experiences where students are using manipulatives to represent real-world situations; building procedural fluency with algorithms by developing conceptual understanding; struggling productively to make sense of ideas while modeling with mathematics; collaborating as they make their reasoning visible while solving challenging problems. I will highlight these issues and provide effective strategies for involving students in authentic mathematical thinking and discovery as they joyfully engage in joyful mathematics! (Received July 30, 2019)