

## CCS Math Guiding Principles

- Principle 1: Learning
  - Stimulate curiosity
  - Meaningful understanding or make sense of new learning
  - Building new knowledge from prior knowledge
  - ***Mathematics should be explored through individual and collaborative ways that stimulate curiosity, build new knowledge from prior knowledge, and promote meaningful understanding of mathematical ideas.***
- Principle 2: Teaching
  - Understand what students need to know and need to learn
  - “Cheerleader” (encourage perseverance)
  - Knowing the connections between the content
  - Knowing common misconceptions
  - ***Effective teaching in mathematics requires understanding of what students already know and need to learn, knowing the content and making connections, anticipating misconceptions, and encouraging perseverance through challenges.***
- Principle 3: Technology
  - Essential
  - Tool for practice for remediation and current learning
  - Tool for understanding in an investigative way
  - Promoting timely feedback
  - ***Technology is an essential tool that should be used to investigate and make sense of mathematical ideas, practice essential skills, remediate and extend learning, and communicate mathematical reasoning.***
- Principle 4: Equity
  - High expectations for all students
  - Strong support
  - ***An excellent mathematics program requires that all students have access to a high-quality curriculum, effective teaching, high expectations and strong support and resources.***
- Principle 5: Curriculum
  - Coherent and focused on important math
  - Well articulated across the grades
  - Developed connections
  - ***An effective math curriculum is coherent and focused on important mathematics, well-articulated across the grades, and develops connections among areas of mathematical study, as well as connections to the real world.***
- Principle 6: Assessment
  - Formative for information purposes for students and teachers
  - Summative of important math content and practices
  - Influences math instruction
  - ***Assessment in mathematics should support student learning-formative data influencing math instruction and summative data influencing program design.***