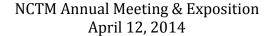


## **Math Practices in Action**

For Pre-K through 2<sup>nd</sup> Grade





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## **Presentation Outline**

- **Opening Statements:** 
  - Introductions
  - Review handout
  - Presentation notes (will be distributed to all *emails on the sign-in sheet*)
- **Overview:** Common Core Standards for Mathematical Practice
  - What are they? Why are they important?
  - Comprehensive descriptions of the Eight Standards for Mathematical Practice
- **Model Problem:** Supporting a variety of problem solving strategies
  - Problem derived from *Illustrative Mathematics*
- **Deeper Exploration I** of math practices: Problem #1 "How Many?"
  - What approaches might students use?
  - What mathematical practices could this problem elicit?
- **Deeper Exploration II** of math practices: Problem #2 "Searching for Patterns" (Van de Walle, p15)
  - What approaches might students use?
  - What mathematical practices could this problem elicit?
- **Questions and Answers**
- Complete the Survey: <a href="https://www.nctm.org/confapp">www.nctm.org/confapp</a>

## References

Barbieri, B. (2010). *Teddy bear counting*. MA: Charlesbridge.

McCallum, B. (2011). Illustrative mathematics. Retrieved from <a href="http://illustrativemathematics.org">http://illustrativemathematics.org</a> NGA Center and CCSSO. (2012). Standards for mathematical practice. Retrieved from

http://www.corestandards.org/math/practice

Van de Walle J.; Karp, S.; Bay-Williams, J. (2013). Elementary and middle school mathematics: Teaching developmentally. (8th ed.). NJ: Pearson.

## **Standards for Mathematical Practice**

1) M	Make sense of problems and persevere in solving them.
2) F	Reason abstractly and quantitatively.
	• Decontextualize:
	• Contextualize
3) (	Construct viable arguments and critique the reasoning of others.
	Model with mathematics.
5) l	Jse appropriate tools strategically.
6) 4	Attend to precision.
7) L	Look for and make use of structure.
ו (פ	Look for and express regularity in repeated reasoning.
0, 1	LOOK for and express regularity in repeated reasoning.