Philadelphia Area Math Teachers' Circle

Group-work Norms and Practice Standards

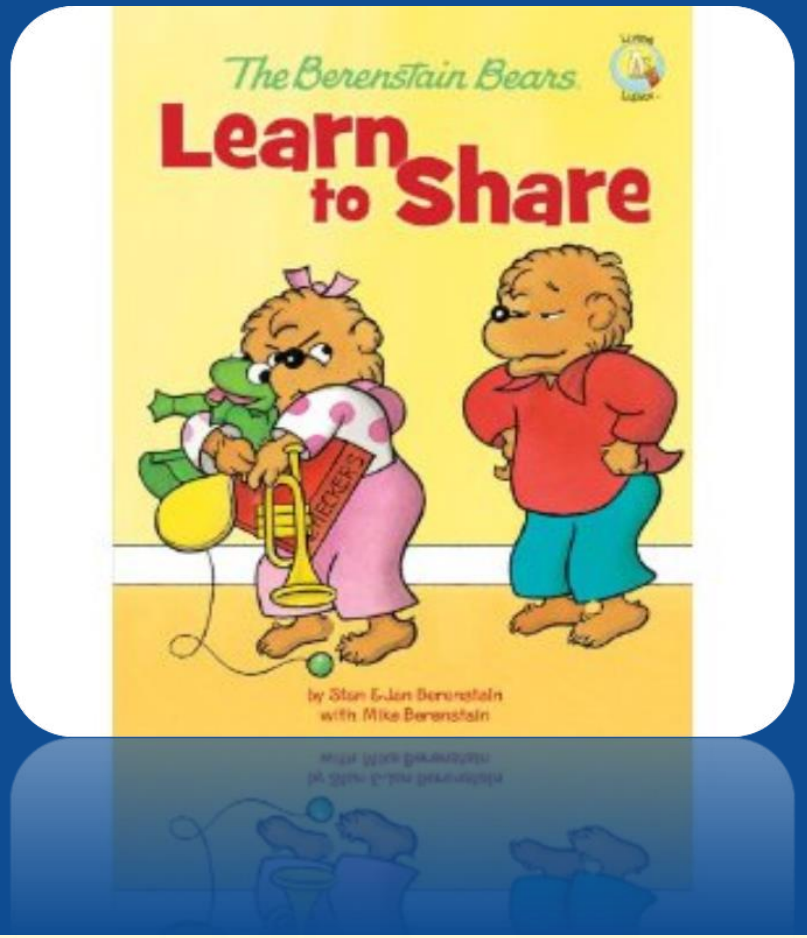
Joshua A. Taton, Ph.D. Cand. (jtaton@pamtc.org)

March 15, 2016

Group-work Norms

Doing math in groups requires care!

- Ask more questions than telling ideas
  - “Say more?” “Why?” “What do you mean?”
  - “How should we proceed?”
  - “Does that connect with what Person B said?”
- Alternate between “time to think” and “bringing ideas to the table”
- Divide labor, adopt a plan, work collaboratively



The Problem!

Math Practice Standards

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

http://mathpractices.edc.org/

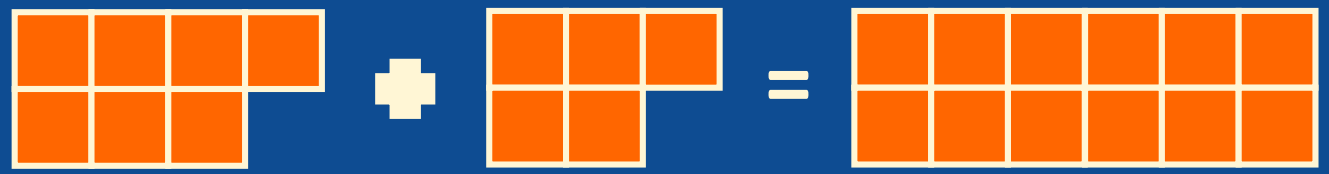
Math Practice Standards

7. CCSS.MP7: Mathematically proficient students look closely to discern a pattern or structure.

Examples:

$$x^4 \cdot x^3 = x \cdot x \cdot x \cdot x \cdot x \cdot x \cdot x = x^7$$

$$t^2 \cdot t^6 = t \cdot t \cdot t \cdot t \cdot t \cdot t \cdot t \cdot t = t^8$$



Math Practice Standards

8. CCSS.MP8: Mathematically proficient students notice if calculations are repeated, and look both for general methods and for shortcuts.

Examples:

When multiplying powers with the same base, add exponents.

An *odd* number added to an *odd* number is an *even* number.

Thank You!

Our next workshop—
Tuesday, April 19th
5:00–7:00PM
2501 Lombard St., TPS

(Usually the 3rd Tuesday of each month)