

ORDER UP: USING NUMBER LINES TO CONNECT AND ACCESS NUMBER CONCEPTS ACROSS GRADE LEVELS

Lauren Zarandona
Math Teacher and Professional Development Leader
lzarandona@themsms.org

A NEED TO WORK ACROSS GRADE LEVELS

- My students can't master their standards because they aren't prepared.
- My students can't master their standards because they have bad habits.
- My school/district has limited applicable PD that involves all math teachers.
- I don't need to know that. It isn't in my standards.

A SIMPLE (STARTER) SOLUTION

- Hold in-house PD involving large number lines
- Prepare sets of numbers and numeric expressions that demonstrate concept development across grade levels

COLOR ORDER & DIRECTIONS

K-2:	white	red	green	
3-5:	white	violet	blue	
6-8:	white	yellow	violet	blue

Shuffle the cards then pass them out, one at a time, until every person has at least one card. Then take turns placing the cards according to the color order. YOU MAY ONLY TOUCH YOUR CARDS.

DISCUSSION:

What do you notice? Develop a list of at least three conjectures that you can make from your numbers.

ROTATE:

Check the number line, making corrections as needed.

What do you notice? Develop a list of at least three conjectures that you can make from your numbers.

WHOLE CLASS DISCUSSION:

- How do these numbers directly relate to your grade-level standards either directly or indirectly?
- What vocabulary words are important to fully understanding the number sets?
- How does the number line help you understand relationships between number and operation?