Goals

See the cyclic approach to MTSS in Math
Determine needs for individual interventions
Understand breaking down of standards
Connect and prioritize strategies
MTSS is defined as a service delivery system based on the concept that ALL students require early and powerful academic and behavioral core instruction with potential high-quality interventions of increasing intensity.
“... to ensure that no struggling student goes unnoticed, where the concerns are in academics, social-emotional development or mental health”

(Wall, 2018)
Diagnostic

MAP Student Profile – Standards

Focus on standards around problem solving and...

K-2 number sense
3-5 operations
6-8 integers and fractions
9-12 solving equations

Priority standards for your school
Research

100:1
Mixed results on programs
 worksheets
Drill and kill computer programs
Interventions need...

Explicit connections
Modeling
Corrective feedback
Preview skills (not review)

Interventions are not just reteaching the same thing over again!
Interventions

Inventory
Tier 1 designation
Standards based
Evidence-based practices
Learningtrajectories.org
Nebraska Math Strategies & Interventions*
If all else fails...
Standards based means...

Aligned to NE grade-level standards
Curriculum guides are accessible to all
BONUS!

Co-teaching
Standards-based IEP goals
<table>
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<th>Lesson</th>
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| 1-3: Decimals to thousandths | Quarter 1 3 days | • Required:  
  o Guided Practice & Problem solving  
  o Homework (21-22)  
  • Optional:  
  o Problem-based learning/Solve & share  
  o Visual Learning  
  o Intervention Activity (21A)  
  o Toss and Talk (21A)  
  o Practice Buddy  
  • Co-Teaching Options  
  o Station teaching  
  o Parallel teaching  
  • Preview Content  
  o How a decimal relates to a fraction  
  o Place value chart for decimals to thousandths | Pearson: TE:17A-21/22  
SE:17-22  
Supplemental:  
https://www.youtube.com/watch?v=KG6lN0iMgM |
Source. Sarana & Clements, 2009a
Standards based

Break down the standard
What are the skills and/or content needed?
What strategies will help the student?
1.1.1.a Count to 120 by ones and tens, starting at any given number.

- Rote counting
  - Number line
  - Hundred chart
  - Chanting
  - Patterning

- One-to-one correspondence
  - Touch with finger
  - Count beads
  - Partner counting
2.1.2.e Add and subtract within 1000, using concrete models, drawings, and strategies, which reflect understanding of place value and properties of operations.

Addition
- Number line
- Place value chart
- Add tens then ones
- Partial sum

Subtraction
- Number line
- Place value chart
- Regrouping
278 + 356

\[
\begin{array}{c}
278 \\
+ 356 \\
\hline
634
\end{array}
\]
5.1.2.a Multiply multi-digit whole numbers using the standard algorithm.

Area model
Partial product
57 \times 26

\begin{align*}
50 & \quad + 7 \\
20 \times 50 &= 1000 \\
20 \times 7 &= 140 \\
50 \times 6 &= 300 \\
7 \times 4 &= 42 \\
\hline
1000 & \\
140 & \\
300 & \\
+ 42 & \\
\hline
1482 \\
\end{align*}

\[
\begin{align*}
57 \\
\times 24 & \\
\hline
42 & \\
300 & \\
140 & \\
\hline
1000 & \\
\hline
1482
\end{align*}
\]
6.1.1.c Compare and order rational numbers both on the number line and not on the number line.

- Model
- Benchmark
- Equivalence (same numerator or denominator)
- Size of pieces
\[
\begin{array}{cccc}
3 & 5 \\
6 & 6 \\
\hline
3 & 7 \\
6 & 15 \\
\hline
31 & 37 \\
64 & 50 \\
\end{array}
\]
11.2.1.e Analyze and graph linear functions and inequalities (point-slope form, slope-intercept form, standard form, intercepts, rate of change, parallel and perpendicular lines, vertical and horizontal lines, and inequalities).

- **Vocabulary**
  - Equation forms
  - Types of lines
  - Inequalities
  - Intercepts

- **Analyze**
  - Convert forms
  - Characteristics

- **Graphing**
  - Graph from form
  - Interpret rate of change
Progress Monitor

Is this working?
Standards based
  Is the student understanding and using the strategies?
Check in every other week
Make decisions every 6-8 weeks