

Tiers, Not Tears, for Early Numeracy Support

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Learn & Reflect Session

Prioritize the Major Clusters

Key: ■ Major Clusters; ■ Supporting Clusters; ● Additional Clusters

Operations and Algebraic Thinking

- Represent and solve problems involving addition and subtraction.
- Understand and apply properties of operations and the relationship between addition and subtraction.
- Add and subtract within 20.
- Work with addition and subtraction equations.

Number and Operations in Base Ten

- Extending the counting sequence.
- Understand place value.
- Use place value understanding and properties of operations to add and subtract.

Measurement and Data

- Measure lengths indirectly and by iterating length units.
- Tell and write time.
- Represent and interpret data.

Geometry

- Reason with shapes and their attributes.

What is Computational Fluency?



∞ Efficiency

∞ Accuracy

∞ Flexibility

Models for thinking



∞ Frames 5, 10 & 20

∞ Number Rack

∞ Number Line

Strategies promote fluency

- ∞ Counting on, doubles, make ten
- ∞ Subtraction as inverse operations, adding up and missing addends
- ∞ Jumping & splitting
- ∞ Modeling and notating student thinking efficiently, flexibly and precisely.

Know from Memory

- ∞ Only 2 standards require “know from memory”...
- ∞ Grade 2, addition facts
- ∞ Grade 3, multiplication facts

Questioning

- ✧ Think-pair-share a few questions that promotes fluency, thinking and the math practices.
- ✧ Let's watch Laurie with an at-risk first grade group.
- ✧ What do you notice?

Progress Monitoring



- ❧ Weekly goals are assessed. That data guides the planning for the following week of intervention.
- ❧ After 8 weeks, this data helps determine whether the interventions are working.
- ❧ Tasks might be scored for the correct answer, with additional points awarded for the use of more efficient and flexible strategies.

Big Ideas & Take Aways



How can we support early numeracy?

- ✧ Think privately about a few things you want to take away.
- ✧ Pair up with someone sitting near you.
- ✧ Let's share with the group.

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