

Figuring Out Fluency Ten Foundations for Reasoning Strategies With Whole Numbers

A Classroom Companion

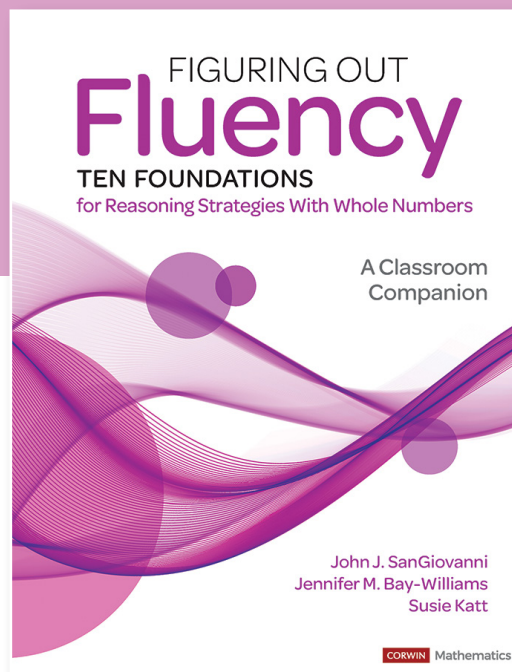
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Fluency in mathematics is more than basic facts or using algorithms. It is not about recall or speed. Real fluency is about choosing strategies that are efficient, flexible, lead to accurate solutions, and are appropriate for the given situation. Developing fluency is a matter of equity and access for all learners.

The landmark book *Figuring Out Fluency in Mathematics Teaching and Learning* offered educators the inspiration to develop a deeper understanding of procedural fluency. It explained the seven Significant Strategies for fluency and offered a plethora of pragmatic tools for shifting classrooms toward a greater fluency approach. However, in order to become truly adept with these strategies, children must first have certain underlying foundational concepts and skills in place.

Figuring Out Fluency-Ten Underlying Foundations for Reasoning Strategies with Whole Numbers explores the ideas that are essential to reasoning: Number Relationships; Subitizing and Decomposing; Distance to 10, 100, and 1,000; Counting and Skip-Counting; Properties of Addition and Its Inverse Relationship with Subtraction; Properties of Multiplication and Its Inverse Relationship with Division; Multiplying by 10s and 100s; Multiples and Factors; Doubling and Halving; and Computational Estimation. With this book, elementary teachers can

- Help children develop these foundational understandings, critical to reasoning and number sense.
- Leverage over 100 classroom-ready routines, centers, and games to develop these concepts both in first instruction, practice, and intervention.
- Download all of the needed support tools, game boards, and other resources from the companion website for immediate implementation
- Develop each and every students' knowledge and power to become skilled and confident mathematical thinkers and doers.



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FIVE STAR REVIEWS



“This book is a game changer! In this companion to the Figuring Out Fluency series, the authors provide teachers with hands-on, engaging resources to support teaching and learning of foundational fluency concepts. This resource uses games, routines, and centers to help focus on reasoning about fluency concepts!”

—**Latrenda Knighten**
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