

Let's Start with a Story: Teaching Math Through Children's Literature K-5

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What does it mean to be mathematically proficient?

- Computational fluency
- Conceptual understanding
- Application/problem solving

What do we want students to know and be able to do?

- Flexible computations
- Conceptual understanding
- Number sense
- Model mathematics in varied ways
- Communicate their mathematical thinking
- Mathematical reasoning
- Problem solving

Instructional Strategies to Build Math Understanding

1. Step back and let them think.
2. Give math a context.
3. Make math visual.
4. Get them talking.
5. Watch, listen, and adjust our math instruction.

From *Math in Practice* (Heinemann, 2016)

What are the benefits of teaching math through literature?

- Engages students
- Helps students make sense of skills and concepts
- Supports problem-solving skills by exploring story situations
- Promotes equity through a shared reading experience
- Encourages talk and collaboration
- Makes math memorable
- Energizes the classroom

"As students solve problems related to story characters and events, their focus extends beyond just *how* to do math and turns to *what* math to do."

Math by the Book

Resources for Integrating Math + Literature

Padlet of K-2 Children's Literature Related to Math Skills/Concepts

<https://padlet.com/sueoc46/math-literature-k-2-j3uevoy154m1fuhb>

Padlet of Grades 3-5 Children's Literature Related to Math Skills/Concepts

<https://padlet.com/sueoc46/math-literature-3-5-who7w8089bm6r6k2>

Padlet of K-5 Culturally Diverse Children's Literature with Math Connections

<https://padlet.com/georginarivera123/culturally-relevant-math-literature-2ygfo12jusaomm7s>

Join our Facebook community focusing on teaching K-5 math.

Join the *Math in Practice/Math by the Book* Facebook Group

For more literature lessons related to grades K-5 math standards:

See the ***Math by the Book*** series for a wealth of grade-specific lessons, problems, prompts, and practice tasks that begin with a story and then use the story context to teach math skills. www.MathbytheBook.com

See Heinemann's ***Math in Practice*** series that features many lessons related to literature as well as a wealth of hand-on lessons for grade-specific math skills and concepts that span your school year.

www.MathinPractice.com

For more ideas: Follow Sue on Twitter @SueOConnellMath or visit her website at

www.qualityteacherdevelopment.com