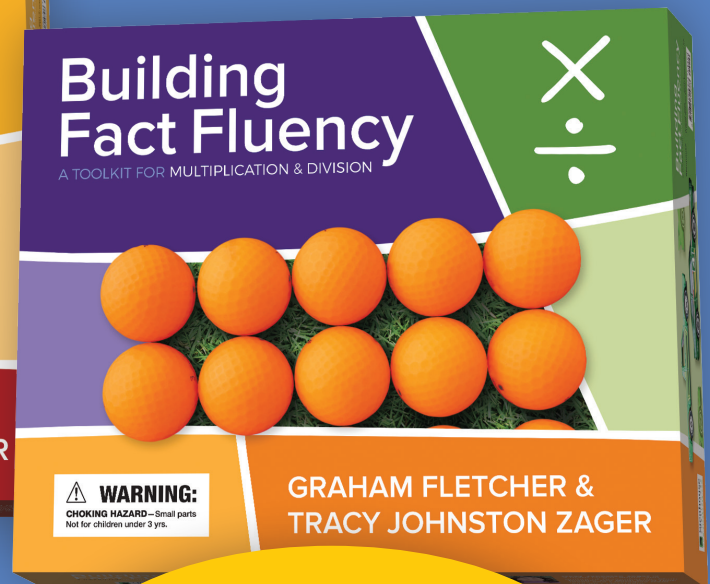
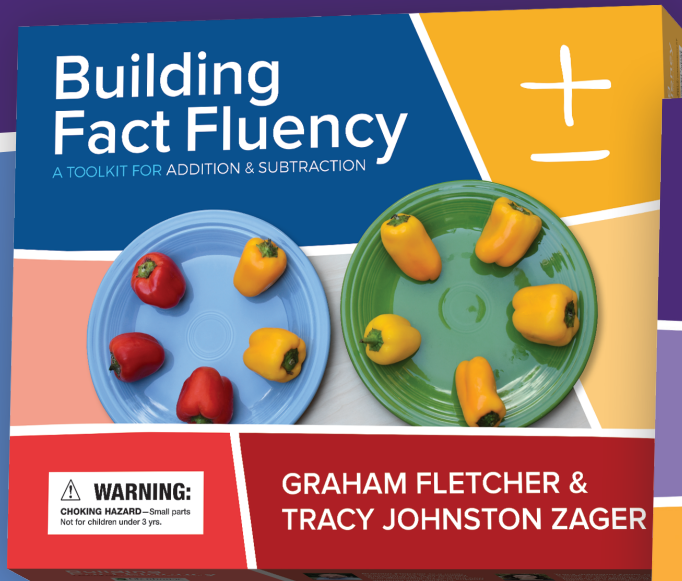


Build Fact Fluency Through Real-World Contexts and Purposeful Practice



**COMPREHENSIVE
LESSONS GROUNDED
IN RESEARCH**

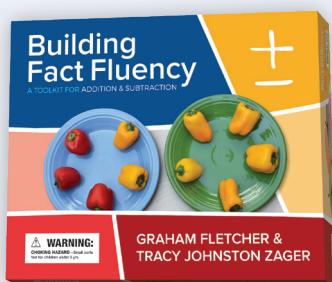


By Graham Fletcher
& Tracy Johnston Zager

ZB Zaner-Bloser

Real-world contexts set the stage for rich conversations and mathematical thinking

Building Fact Fluency toolkits (*Addition & Subtraction* and *Multiplication & Division*) help students develop deep conceptual understanding of the operations and fact fluency at the same time. Research-based and standards-aligned, each toolkit invites students to think strategically about mathematics through multiple, rich, real-world contexts. These accessible contexts allow students to see how number facts connect to a wide variety of mathematical situations, explore the properties of the operations, and build a foundation of strategies they can draw from efficiently and with confidence.



Who It's For

Each *Building Fact Fluency* toolkit is an ideal supplement to any curriculum or for any situation where students need additional fact fluency practice and review.

- ✓ **K–5+ Classrooms**
- ✓ **Intervention**
- ✓ **English Language Learners**
- ✓ **Special Education**
- ✓ **After School, Summer School, and Tutoring**

Addition & Subtraction Grades K–2

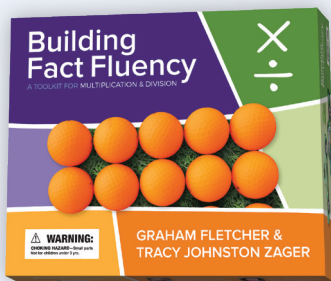
STRATEGY	CONTEXT		
SUMS WITHIN 5	Crayons	Marbles	Toy Cars
PLUS AND MINUS 0, 1, 2	Shells	Bears	Blocks
COMBINATIONS FOR 10	Buttons	Markers	Peppers
10 AND SOME MORE	Markers	Pizza	Coins
DOUBLES	Lemonade	Apples	Eggs
NEAR DOUBLES	Apples	Eggs	Chopsticks
PRETEND-10/MAKE-10	Markers	Pizza	Tennis Balls

How It Works

Each of the strategies and factors covered in the toolkits is taught through three real-world contexts supported by a string of related activities, tasks, and games. This allows students to see how number facts connect to a wide variety of mathematical situations and problem types.

“Every time my students uncover a new strategy, they build their fluency and become flexible number thinkers.”

—LAURA TOMAS
K–5 Math Coach,
Palm Beach County, FL



Multiplication & Division Grades 3–5

FACTOR	CONTEXT		
2s	Toy Bikes	Honey Bears	Shoes
10s	Bowling	Pencils	Bracelets
5s	Grapes	Crayons	Erasers
4s	Peaches	Coin Collection	Basketballs
3s	Tennis Balls	Stacking Blocks	Bobbers
6s	Eggs	Cupcakes	Toy Cars
9s	Stickers	Tulips	Bookshelves
8s	Apple Slices	Paints	Emojis
7s	Lemons	Gumballs	Balloons
SQUARES & NEAR SQUARES	Sushi	Origami	Golf Balls

Note: 0s and 1s are interwoven throughout each factor

Addition & Subtraction Toolkit Components

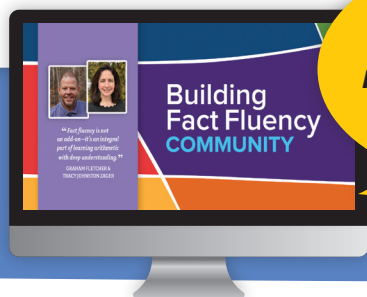


WHAT'S INSIDE

- Getting Started Guide
- Facilitator's Guide
- Image Talks Flipbook (For Small Groups)
- Tool Talks Flipbook (For Small Groups)
- Games for Purposeful Practice (For Whole Class or Small Groups)
 - 29 different demonstration gameboards
 - 13 card decks containing 5-, 10-, and double 10-frame cards
 - 500 playing counters
 - 39 10-sided dice
 - 39 6-sided dice

WHAT'S ONLINE

- Multi-year pacing options
- Image Talks
- Anchor Problems (in English and Spanish)
- Tool Talks
- Conceptualized Practice Problems (in English and Spanish)
- Number Talks
- Games Boards (in English and Spanish)
- 3-Act Math Task Videos (in English and Spanish)
- Student Recording Sheets (in English and Spanish)
- Professional Learning and Classroom Videos
 - Observations and Interviews
 - Looking at Student Work
 - Journaling and Reflection
 - Student Self-Assessment



Join the
**Building Fact
Fluency Facebook
Community!**

Multiplication & Division Toolkit Components



WHAT'S INSIDE

- Getting Started Guide
- Facilitator's Guide
- Image Talks Flipbook (For Small Groups)
- Tool Talks Flipbook (For Small Groups)
- Game Pieces
 - 700 playing counters
 - 48 10-sided dice
 - 48 6-sided dice
- Array and Group Cards
 - Array Card Deck includes 55 different cards
 - Grouping Card Deck includes 81 different cards
 - Games at a Glance Guide

WHAT'S ONLINE

- Image Talks
- Tool Talks
- Number Talks
- Contextualized Practice Problems (in English and Spanish)
- Game Boards (in English and Spanish)
- Optional Routines: Same/Different, Card Talk, True/False, Open Middle Problems
- Student Recording Sheets (in English and Spanish)
- 3-Act Math Task Videos (in English and Spanish)
- Professional Learning Videos
 - Observations and Interviews
 - Looking at Student Work
 - Journaling and Reflection
 - Student Self-Assessment

 **WARNING:**
CHOKING HAZARD—Small Parts
Not for children under 3 yrs.

TRY IT OUT! Request access to sample lessons and explore lesson strings at
zaner-bloser.com/mathematics/building-fact-fluency/materials.php