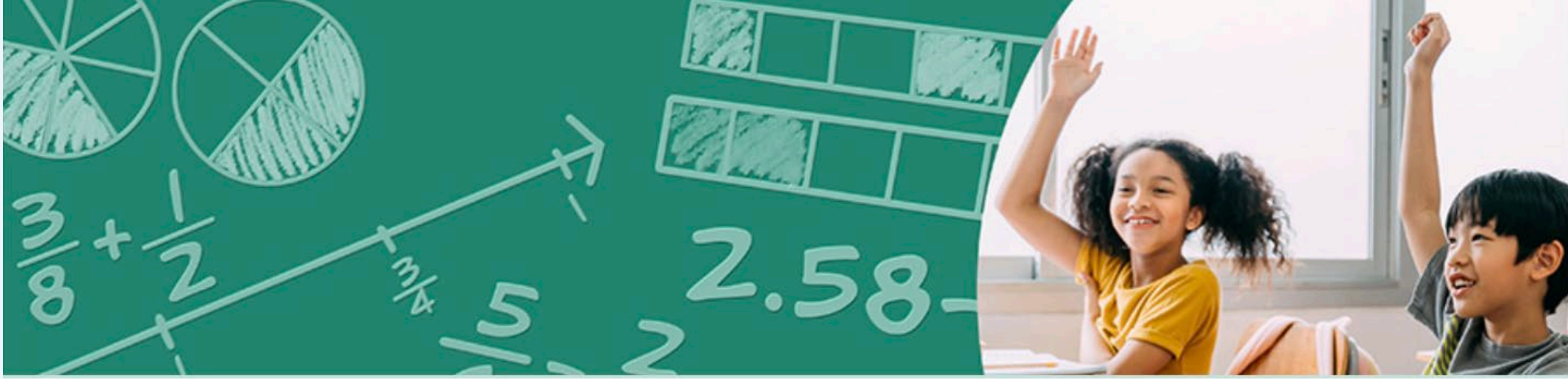

Mathematics Intervention Toolkit: High-Quality Resources for Professional Learning on Effective Practices in Grades 3–6

April 29, 2026

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Emily Veader, Arlington Public Schools, MA
Amy Brodesky, Emily Fagan, Kate Coleman, REL Northeast & Islands

Who Are We?

REL Northeast & Islands is one of ten Regional Educational Laboratories.

We work in partnership with educators and policymakers to develop/use research that improves academic outcomes for students.

What we do:

- Conduct research studies
- Disseminate research findings to those we serve
- Strategically engage with partners to use findings
- Design and deliver technical assistance focused on the use of data and research

Welcome! We'll be starting soon.

 Q&A Pod				
Use the Q&A Pod for asking questions	AI notetakers will be removed	Slides and recording will be posted and emailed	This webinar includes closed captions	Tell us how we did in the survey at the end

Introductions

Amy Brodesky
Toolkit Development Team
REL Northeast & Islands

Emily Fagan
Toolkit Development Team
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Kate Coleman
Toolkit Development Team
REL Northeast & Islands

Emily Veader
Lead Math Coach (K–5)
Arlington Public Schools

Michelle Sirois
Math Interventionist
Milford Public Schools

Agenda

- Toolkit Overview
- A Teacher's Perspective
- A District Leader's Perspective
- Questions & Answers

Session Goals: We hope you will leave with an understanding of the toolkit and ideas for using it in your role.

Toolkit Overview

Why Focus on Mathematics Intervention?

Need: Many students are not reaching proficiency in grade-level standards. Over time, students with low math performance may fall further behind higher-performing peers, widening the opportunity gap.

Math intervention provides targeted, supplemental instruction for students, *in addition* to core math instruction.

Key Questions

- What are effective math intervention practices?
- How do you implement them with students?

Sources: National Assessment of Educational Progress (2022); WWC Practice Guide (2021)

What Is the Mathematics Intervention Toolkit?

Goal: Support educators and leaders in learning about and using **effective intervention practices** in their classrooms, schools, and districts

- Offers a suite of **free, high-quality resources**
- Includes a professional learning **course**

Note: The toolkit is **not** an intervention program for students.

Who Is the Course For?

Educators:

- **Teachers of math intervention** (grades 3–6): interventionists, Title I teachers, general educators, special educators, and others
- **Math coaches** who work with intervention teachers

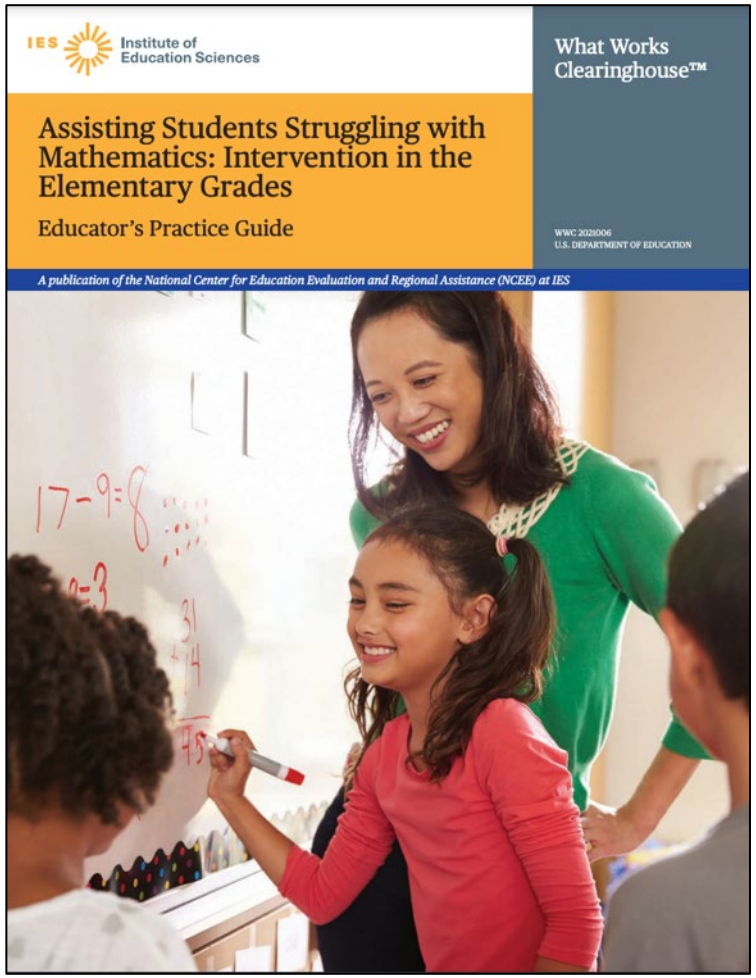
Facilitators: School/district math leader, math coach, or teacher leader

Districts:

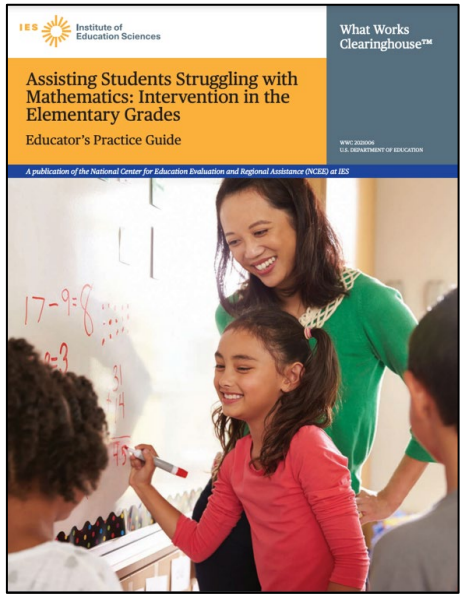
- Applicable to districts with a variety of intervention models and structures
- Curriculum agnostic: No requirements to use a specific intervention program or to have adopted a program

Course Focuses on Evidence-Based Recommendations

- Based on the What Works Clearinghouse (WWC) Practice Guide *Assisting Students Struggling with Mathematics*
- Education experts and researchers reviewed 44 **studies on effective math intervention practices**
- Guide provides **evidence-based recommendations** with implementation steps and strategies
- Course **connects** research to classroom practice



How Did We Create a Course on the Recommendations?

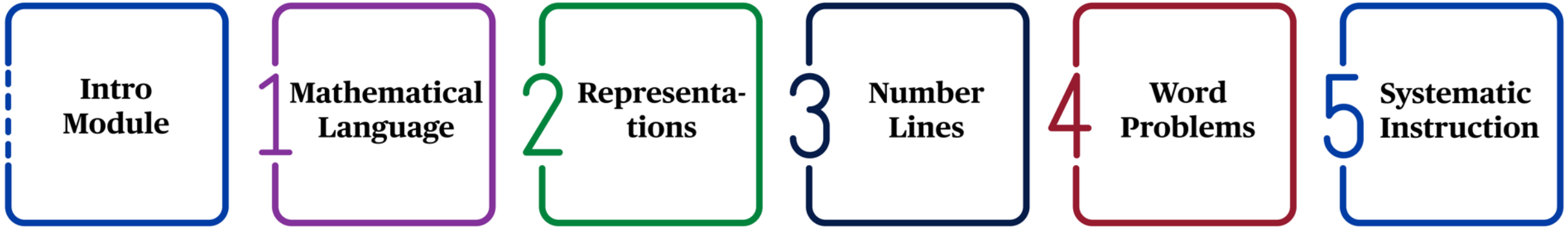


WWC Practice Guide:
Evidence-based Recommendations

Development, Review, & Revision
REL-NEI team
Partnership of district leaders
Collaborating practitioners
Peer review by subject matter experts

Testing with Teachers
Pilot and Usability Tests
Field Tests
98 teachers from 29 districts

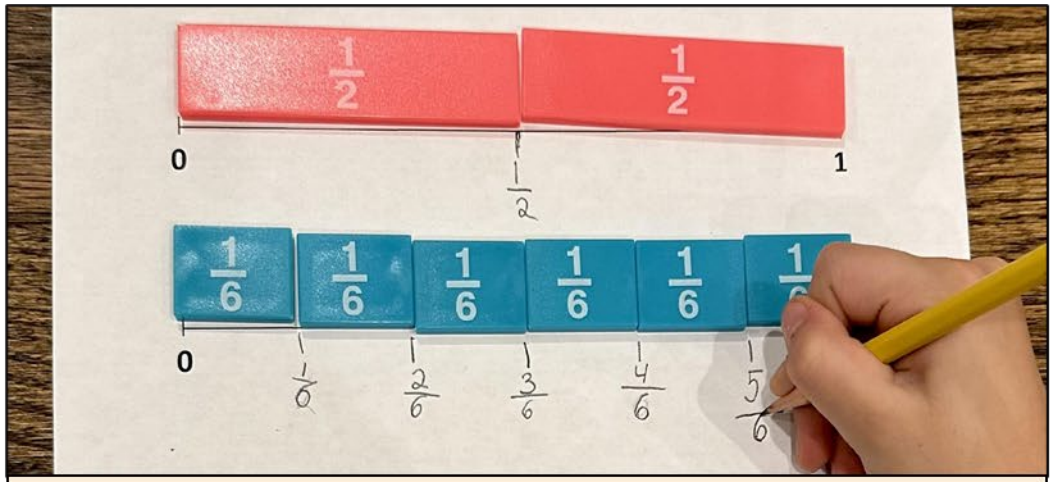
Course Modules



- **Modules** allow for in-depth learning and flexibility in implementation
- Full course provides about **28 PD hours** during 1 or 2 school years
- **Options** to use **shorter versions** or **individual modules**

Example Recommendation: Number Lines

"Use the number line to support learning of mathematical concepts and procedures, build understanding of grade-level material, and prepare students for advanced mathematics."

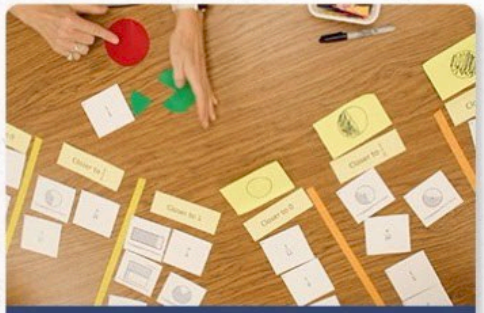


Use concrete materials—like fraction tiles and folding paper strips—**to build number lines.**

Use kinesthetic activities, like walking on a number line.

What do educators do in a course module?

Instructional Routines for Teachers to Use with Students



Sort, Explain and Generalize

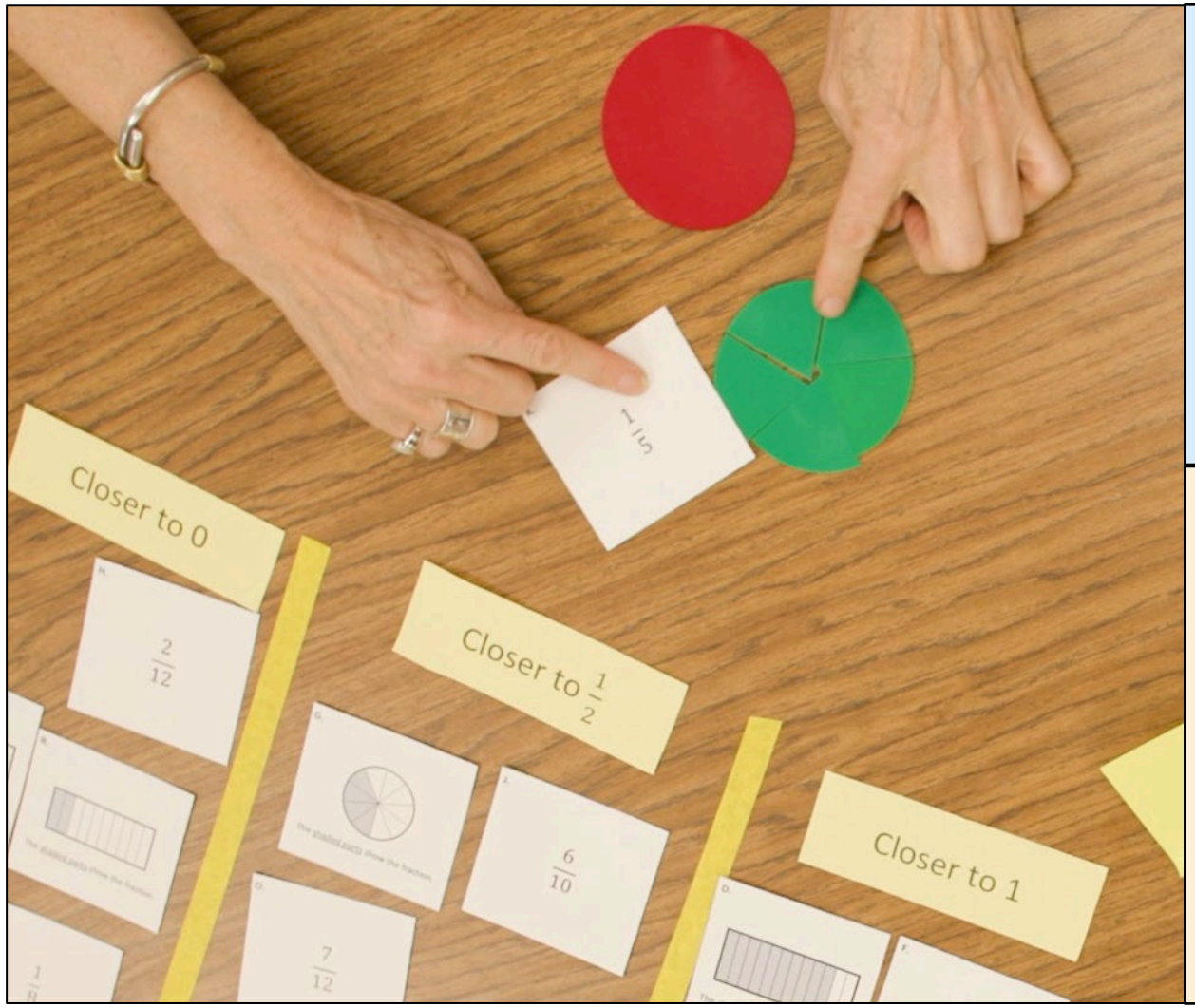
Math Language: Choose and Explain

Representations: Is it True?

Number Lines: Locate and Compare

Word Problems: Act, Represent, and Solve

Example Routine: Sort, Explain, and Generalize



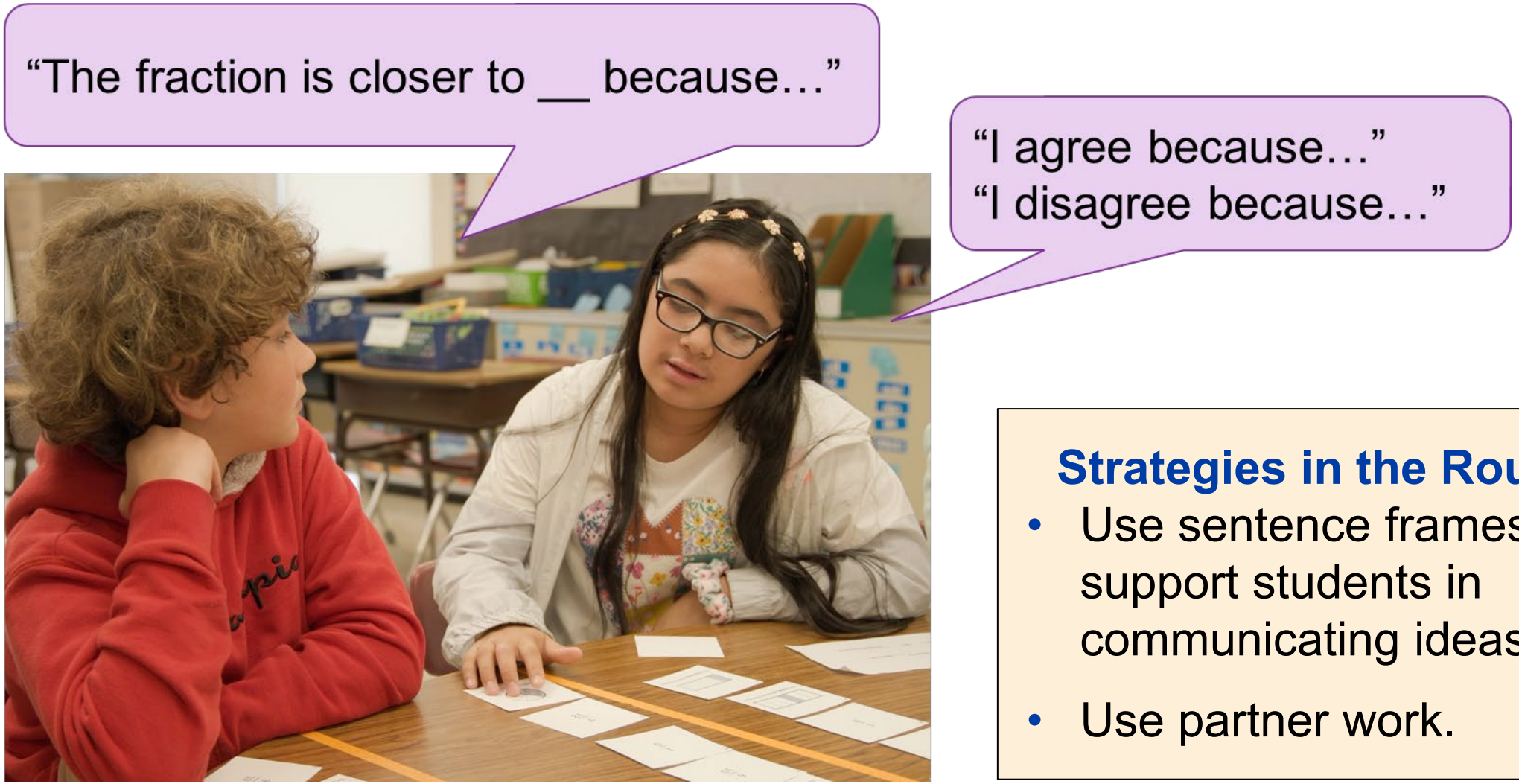
Steps

1. Sort cards and explain reasons.
2. Discuss and generalize.
3. Wrap up and reflect.

Strategies in the Routine

- Use concrete, semi-concrete, and abstract representations.
- Connect representations.
- Use accessible fractions.

Routines Use Mathematical Language Strategies

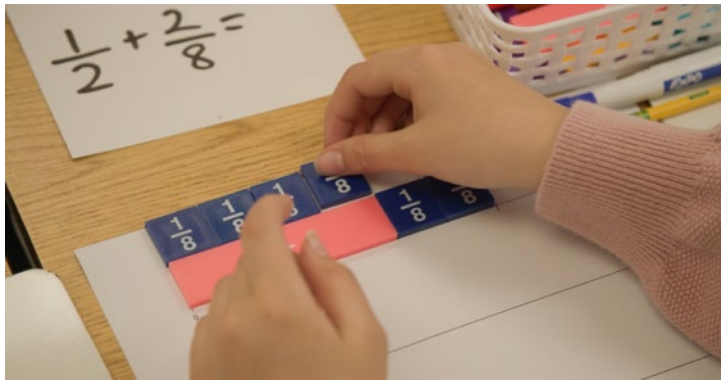


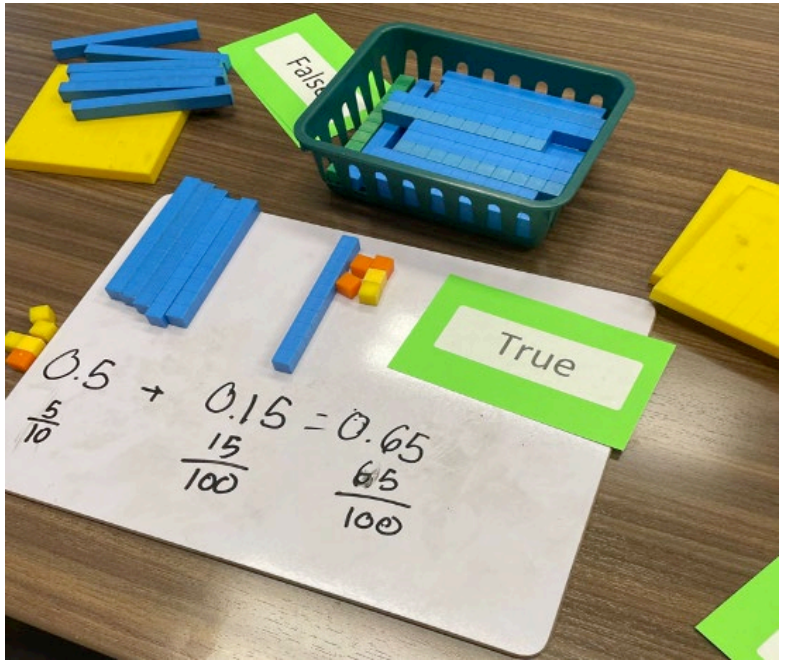
Strategies in the Routine

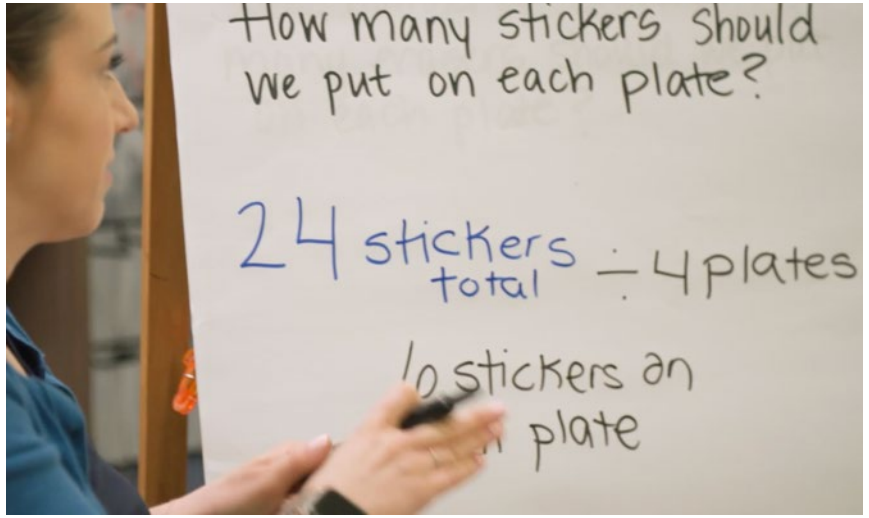
- Use sentence frames to support students in communicating ideas.
- Use partner work.

Routines Focus on High-Priority Mathematics Content

Topics include whole-number place value, fractions, decimals, and word problems

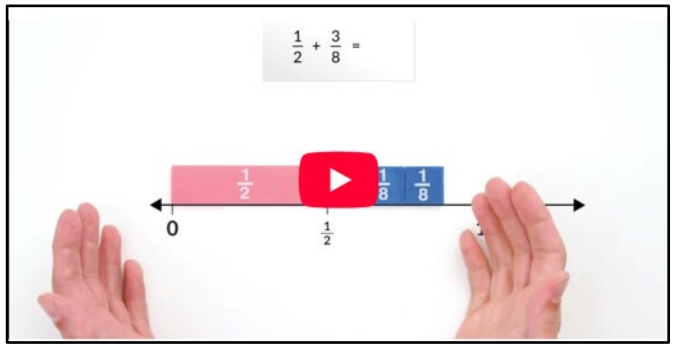






Course Components

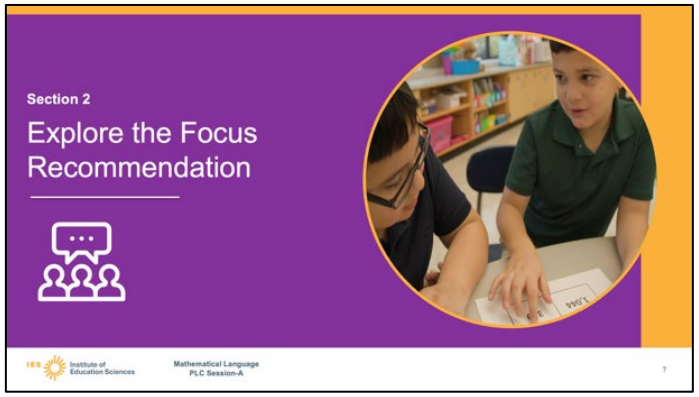
Classroom Videos



Strategy Videos

Math Activities & Routines

Participant Workbooks,
Facilitator Guides & a Leader Guide



Slide Decks with
Presenter Notes

Course Implementation Options

October	Oct. – Nov.	Nov. – Dec.	Jan. – Feb.	Feb. – March	March
Introductory Module	1. Math Language	2. Represent-ations	3. Number Lines	4. Word Problems	5. Systematic Instruction

- **Full Course**: six modules (about 28 PD hours) during 1 or 2 school years
- **Shorter versions**
- **Individual modules**

How might you get started?
Try the Introductory Module and the Math Language or Representations Module.

Practitioners' Perspectives

Michelle Sirois
Mathematics Intervention Teacher
Milford Public Schools

Emily Veader
Lead Math Coach (Grades K-5)
Arlington Public Schools

Mathematics Intervention Toolkit Recap

Provides free access to high-quality resources, including:

- Videos
- Readings
- Online Learning Activities
- Instructional Routines
- Participants Workbooks
- Facilitator Guides and Slide Decks
- Leader Guide

Website:

https://ies.ed.gov/ncee/rel/math-support-grades-3-6

Thank You for Joining Us!

Please take a moment to complete a brief survey when the webinar room closes.

Your feedback helps us improve future events.

Questions? Please reach out.

Contact

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