

Teacher Preparation Resources

Tools and resources to meet the needs of future teachers of mathematics

Mathematics Resources to Support the Shifts Required by College- and Career-Ready Standards

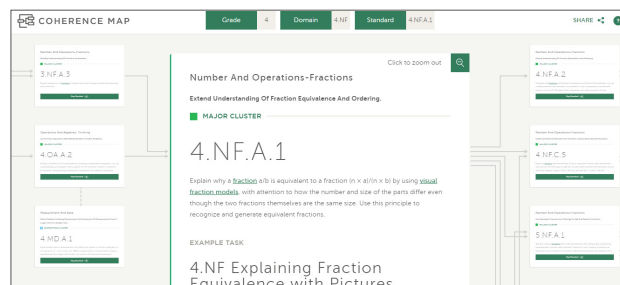
Coherence Map

achievethecore.org/coherence-map

The Coherence Map is an interactive website that illustrates the coherent structure of the Common Core State Standards for Mathematics K-8.

Help teacher candidates:

- Explore and internalize the progressions in the math standards.
- Develop a deeper understanding of the standards through sample tasks, illustrations, and assessment items.
- See the connections between standards and identify the related prerequisite skills.
- Prepare to scaffold instruction or address unfinished learning.



“This is the best new tool to assist pre-service teachers in understanding and using the Common Core standards. I use the Coherence Map during each class session.”

Mary Mueller Ed.D., Associate Professor, Seton Hall

Focus Documents

achievethecore.org/focus

The Focus Documents detail the content emphases of the standards and highlight progressions from K-8 as well as the fluency requirements of grades K-6.

Help teacher candidates:

- Better understand the organizational structure of the standards and the value of content emphases.
- See what content is identified as major, supporting, and additional work in the standards for grades K-8.

A screenshot of the Focus Document for Grade 3 Mathematics. The header reads 'CCSS WHERE TO FOCUS GRADE 3 MATHEMATICS' and includes icons for 'MATH', '3', and 'F'. A key message states: 'This document shows where students and teachers should spend the large majority of their time in order to meet the expectations of the Standards.' It also notes: 'Not all content in a given grade is emphasized equally in the Standards. Some clusters require greater emphasis than others based on the depth of the ideas, the time that they take to master, and/or their importance to future mathematics or the demands of college and career readiness. More time in these areas is also necessary for students to meet the Standards for Mathematical Practice.' The document is divided into several sections: 'MAJOR, SUPPORTING, AND ADDITIONAL CLUSTERS FOR GRADE 3' (with a key for Major Clusters, Supporting Clusters, and Additional Clusters), 'HIGHLIGHTS OF MAJOR WORK IN GRADES K-8', and 'REQUIRED FLUENCIES FOR GRADE 3'. The fluencies listed are 3.OA.C.7 (Single-digit products and quotients) and 3.NB.A.2 (Add/subtract within 1000).

Lesson Planning Tool

achievethecore.org/lesson-planning-tool

The Lesson Planning Tool is a digital resource that takes teacher candidates through a series of prompts with embedded professional learning.

Help teacher candidates:

- Learn a step-by-step process for planning reading instruction that is rooted in the math Shifts required by college- and career-ready standards.
- Analyze a lesson within a comprehensive curriculum for alignment to the math Shifts required by college- and career-ready standards

Math Mini-Assessments

achievethecore.org/math-mini-assessments

The Math Mini-Assessments are a set of classroom assessments designed to highlight one or more aspects of the math Shifts required by college- and career-ready standards. These resources offer commentary and context about the targeted standards in order to detail the full expectation for mastery, including definitions, resources, and misconceptions.

Help teacher candidates:

- Better understand the content of a particular standard and how it can be assessed.
- Explore the Shift of Rigor; how it appears in the standards and how it is addressed in assessments.

“The math assessments allow the candidates to experience and discuss the complexity and Rigor of the grade-level standards. They also are able to view the assessments and check to see if they are using or asking items of the same Depth of Knowledge in their instruction.”

Terri Gibbs-Burke, Math Methods Lecturer, Cal Poly San Luis Obispo

Coherence Card Activity

achievethecore.org/coherence-sort

The Coherence Card Activity is a 60-minute professional learning activity that engages teacher candidates to uncover some of the math progressions woven into the standards and illustrates Coherence across grades and within a grade.

Help teacher candidates:

- Explore the shift of Coherence and how it appears in the standards.
- Learn about the math progressions.
- Closely read a variety of K-8 math standards.

