

Why Zearn?

Understanding the Shifts in our
New Standards

Math

Agenda:

- Why new standards?
- The Shifts in Math
- Quick look at the major content by grade level
- The teacher side of Zearn (Bridges for K & 1st)
- The student's experience
- How can you support at home?
- Questions

COMMON CORE STATE STANDARDS



ENGLISH
LANGUAGE ARTS



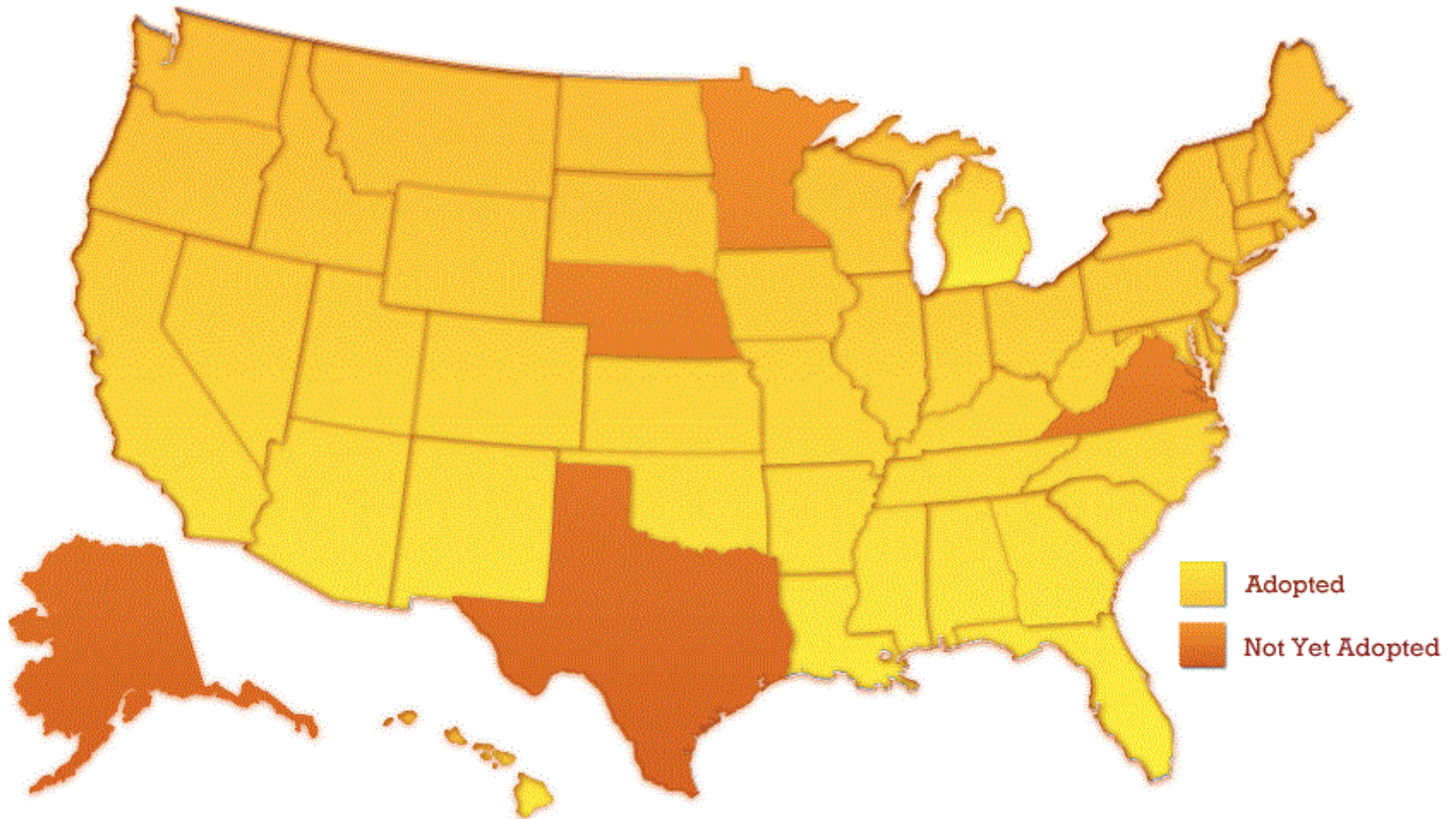
MATHEMATICS



**Three-Minute Video Explaining the Common
Core State Standards**

<http://vimeo.com/51933492>

Common Core Across the Nation



What are the Common Core State Standards?

The Common Core State Standards set grade-by-grade learning expectations for students in grades K-12 for Mathematics and for English Language Arts and Literacy.

While states have had standards for more than 15 years, this set of standards is more focused on preparing students for success in college and career. They set **clear**, **consistent** and **high learning goals**.

The Shifts in Mathematics

1. **Focus:** Focus strongly where the standards focus
2. **Coherence:** **Think** across grades, and **link** to major topics
3. **Rigor:** In major topics, pursue **conceptual understanding**, procedural skill and **fluency**, and **application** with equal intensity

Major Content by Grade Levels (K-8)

| Grade | High-Level Summary of Major Work in Grades K–8 |
|-------|--|
| K–2 | Addition and subtraction - concepts, skills, and problem solving; and place value |
| 3–5 | Multiplication and division of whole numbers and fractions - concepts, skills, and problem solving |
| 6 | Ratios and proportional relationships; early expressions and equations |
| 7 | Ratios and proportional relationships; arithmetic of rational numbers |
| 8 | Linear algebra and linear functions |

Content Emphases by Cluster--Grade 3

Key: ■ Major Clusters; ■ Supporting Clusters; ● Additional Clusters

Operations and Algebraic Thinking

- Represent and solve problems involving multiplication and division.
- Understand properties of multiplication and the relationship between multiplication and division.
- Multiply and divide within 100.
- Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Number and Operations in Base Ten

- Use place value understanding and properties of operations to perform multi-digit arithmetic.

Number and Operations—Fractions

- Develop understanding of fractions as numbers.

Measurement and Data

- Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.
- Represent and interpret data.
- Geometric measurement: understand concepts of area and relate area to multiplication and to addition.
- Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.

Geometry

- Reason with shapes and their attributes.

What happens in class?

[Zearn.org](https://www.engage-nyc.org/) (Engage New York)

- Teacher's side
- Student's side

Kinder and 1st – Bridges (also Common Core aligned)

How can you help your child in math?

- Help children practice their addition, subtraction, multiplication and division facts.
- Encourage children not to give up while solving problems, to build stamina and develop their critical thinking skills. Don't give them the answers - ask them to think of different ways they can solve problems.
- Have children illustrate the math they were thinking in their head and discuss it out loud.
- Have children apply their math knowledge to a real-world scenario at home, such as doubling a recipe, calculating the area of a room or analyzing sports statistics.

Additional Resources

Council of the Great City Schools Parent Roadmaps:

- Math

<http://www.cgcs.org//site/Default.aspx?PageID=244>

- ELA / Literacy

<http://www.cgcs.org/Page/328>

- National Parent Teachers Association (PTA)

<http://pta.org/parents/content.cfm?ItemNumber=2583>

- Achieve the Core

www.achievethecore.org

- Common Core State Standards Text Exemplars

http://www.corestandards.org/assets/Appendix_B.pdf