COMMON CORE STATE STANDARDS OVERVIEW

The Shifts:

What they are and why they are important

Rationale for the CCSS

- Declining US competitiveness with other developed countries
- High rates of college remediation
- NAEP performance that is largely flat over the past 40 years in 8th grade
  - Slight improvement at the 4th grade level
  - Slight decline at the high school level

Principles of the CCSS

- Aligned to requirements for college and career readiness
- Based on evidence
- Honest about time

ELA/Literacy: 3 shifts
The What

1. **Building knowledge** through **content-rich nonfiction**

2. Reading, writing, and speaking grounded in **evidence from text,** both literary and informational

3. Regular practice with **complex text** and its **academic language**

The Why: Shift One

Building knowledge through content-rich nonfiction

- Much of our knowledge base comes from informational text
- Informational text makes up vast majority of required reading in college/workplace (80%)
- Informational text harder for students to comprehend than narrative text
- Yet students are asked to read very little of it in elementary (7 - 15%) and middle school
- CCSS moves percentages to
  - 50:50 at elementary level
  - 75:25 at secondary level (includes ELA, science, social studies)

The Why: Shift Two

Reading, writing & speaking grounded in evidence, both literary and informational

- Most college and workplace writing is evidence-based and expository in nature (not narrative)
- Ability to cite evidence differentiates student performance on NAEP
- Standards in writing ask students to respond to evidence-based writing prompts (inform/argue)
- Standards in speaking and listening require students to prepare for and refer to evidence on ideas under discussion
- Standards in reading require students to respond to text-dependent questions with evidence-based claims

The Why: Shift Three
Regular Practice with Complex Text and its Academic Language

- Gap between complexity of college and high school texts is huge
- What students can read, in terms of complexity is greatest predictor of success in college (ACT study)
- Too many students reading at too low a level (<50% of graduates can read sufficiently complex texts)
- Standards include a staircase of increasing text complexity from elementary through high school
- Standards also focus on building vocabulary that is shared across many types of complex texts and many content areas

Mathematics: 3 shifts
The What

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**

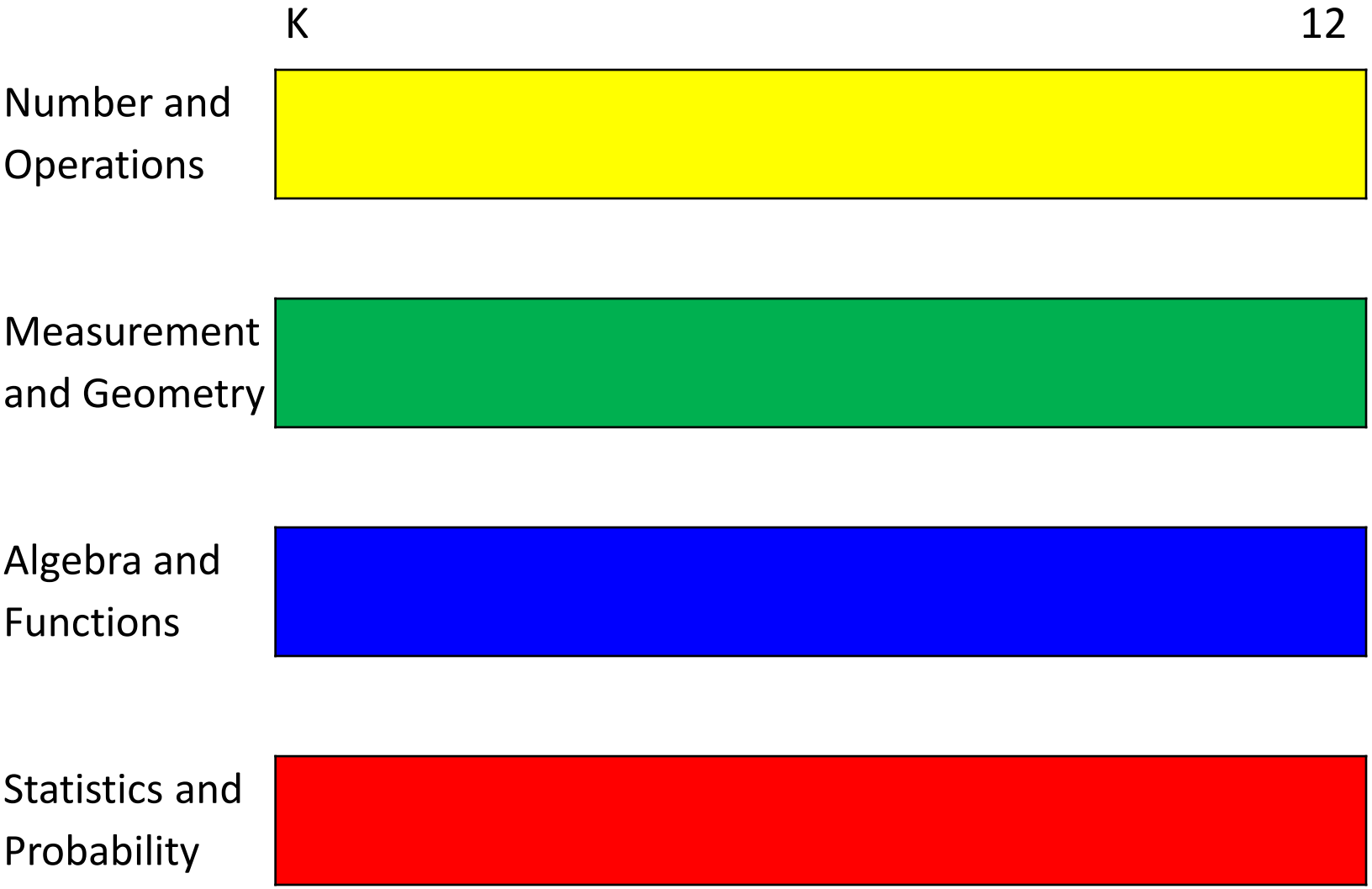
The Why: Shift One

Focus strongly where the Standards focus

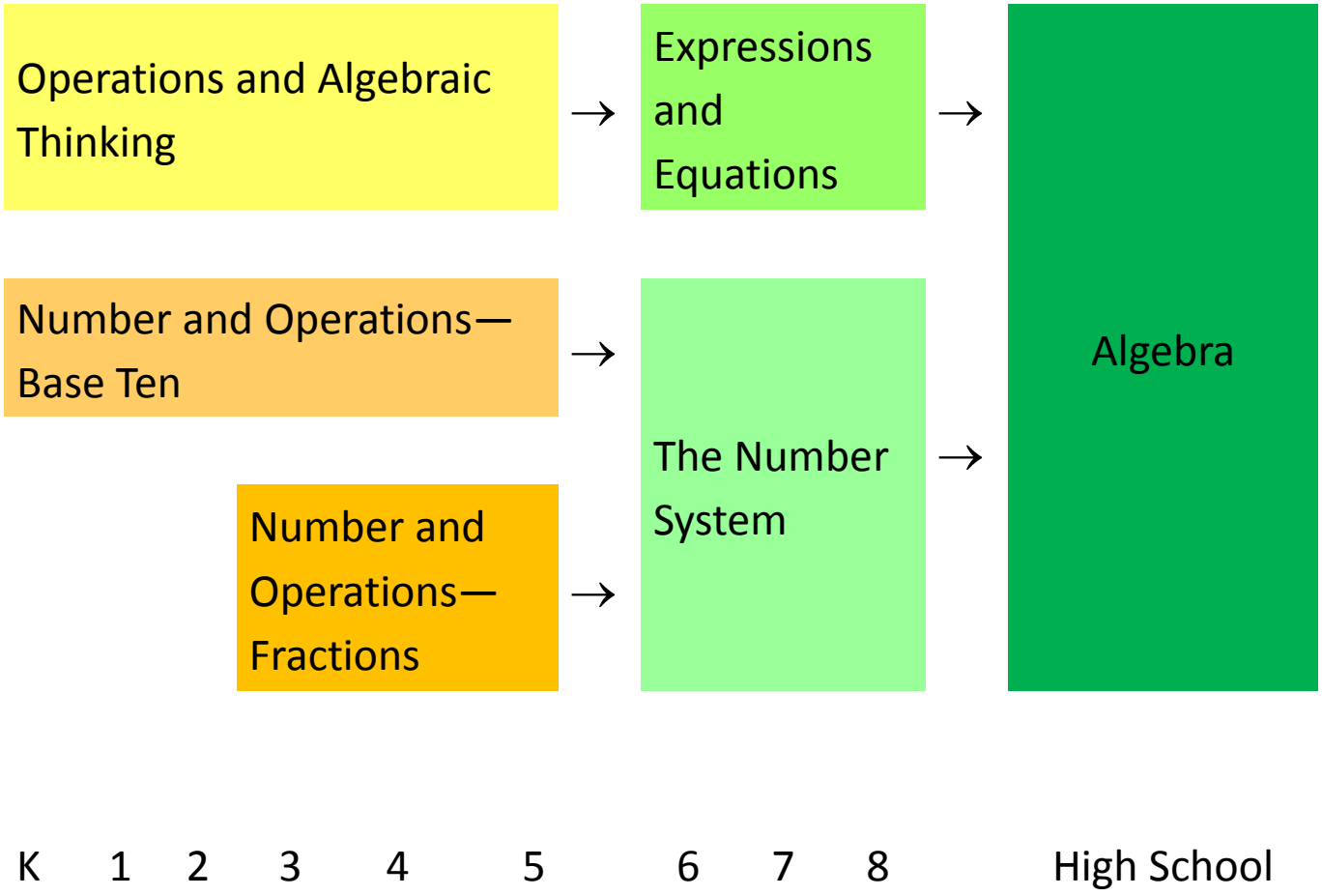
- Significantly narrow the scope of content and deepen how time and energy is spent in the math classroom

- Focus deeply only on what is emphasized in the standards, so that students gain strong foundations

Traditional U.S. Approach



Focusing attention within Number and Operations



The Why: Shift Two

Coherence Think across grades, and link to major topics within grades

- Carefully connect the learning within and across grades so that students can build new understanding onto foundations built in previous years.

- Begin to count on solid conceptual understanding of core content and build on it. Each standard is not a new event, but an extension of previous learning.

Coherence: Think across grades

Fraction example:

"The **coherence** and sequential nature of mathematics dictate the foundational skills that are necessary for the learning of algebra. The most important foundational skill not presently developed appears to be proficiency with fractions (including decimals, percents, and negative fractions). **The teaching of fractions must be acknowledged as critically important and improved before an increase in student achievement in algebra can be expected**."

Final Report of the National Mathematics Advisory Panel (2008, p. 18)

Coherence: Link to major topics within grades

Example: data representation

Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs. *For example, draw a bar graph in which each square in the bar graph might represent 5 pets.*

Standard 3.MD.3

Coherence: Link to major topics within grades

Example: Geometric measurement

Geometric measurement: understand concepts of area and relate area to multiplication and to addition.

3.MD, third cluster

The Why: Shift Three

Rigor In major topics, pursue conceptual understanding, procedural skill and fluency, and application

- The CCSSM require a balance of:
  - Solid conceptual understanding
  - Procedural skill and fluency
  - Application of skills in problem solving situations

- This requires equal intensity in time, activities, and resources in pursuit of all three

Priorities in Mathematics

Grade	Priorities in Support of Rich Instruction and Expectations of Fluency and Conceptual Understanding
K–2	Addition and subtraction, measurement using whole number quantities
3–5	Multiplication and division of whole numbers and fractions
6	Ratios and proportional reasoning; early expressions and equations
7	Ratios and proportional reasoning; arithmetic of rational numbers
8	Linear algebra

Required Fluencies in K-6

Grade	Standard	Required Fluency
K	K.OA.5	Add/subtract within 5
1	1.OA.6	Add/subtract within 10
2	2.OA.2 2.NBT.5	Add/subtract within 20 (know single-digit sums from memory) Add/subtract within 100
3	3.OA.7 3.NBT.2	Multiply/divide within 100 (know single-digit products from memory) Add/subtract within 1000
4	4.NBT.4	Add/subtract within 1,000,000
5	5.NBT.5	Multi-digit multiplication
6	6.NS.2,3	Multi-digit division Multi-digit decimal operations

Implementation

- The CCSS uses an eraser and pen and provides time and space to focus on doing fewer things better
- Implementation of the CCSS must be integrated into other efforts of educational improvement, not one more thing
- Commit to a small number of metrics that address
  - Teacher Practice and Knowledge
  - Instructional Materials and Resources
  - Student Work

Resources

- www.achievethecore.org
- www.pta.org/4446.htm
- http://parcconline.org/parcc-content-frameworks