## **Engaging With the Three Shifts of the**

## **Common Core State Standards for Mathematics**

Shift One: Focus strongly where the Standards focus.

 In your groups, discuss ways you could respond if someone asks you the following question, "Why focus? There's so much math that students could be learning, why limit them?"

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Grade	Which two of the following represent areas of major focus for the indicated grade?				
К	Compare numbers	Use tally marks	Understand meaning of addition and subtraction		
1	Add and subtract within 20	Measure lengths indirectly and by iterating length units	Create and extend patterns and sequences		
2	Work with equal groups of objects to gain foundations for multiplication	Understand place value	Identify line of symmetry in two dimensional figures		
3	Multiply and divide within 100	Identify the measures of central tendency and distribution	Develop understanding of fractions as numbers		
4	Examine transformations on the coordinate plane	Generalize place value understanding for multi-digit whole numbers	Extend understanding of fraction equivalence and ordering		
5	Understand and calculate probability of single events	Understand the place value system	Apply and extend previous understandings of multiplication and division to multiply and divide fractions		
6	Understand ratio concepts and use ratio reasoning to solve problems	Identify and utilize rules of divisibility	Apply and extend previous understandings of arithmetic to algebraic expressions		
7	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers	Use properties of operations to generate equivalent expressions	Generate the prime factorization of numbers to solve problems		
8	Standard form of a linear equation	Define, evaluate, and compare functions	Understand and apply the Pythagorean Theorem		

## Shift Two: Coherence: Think across grades, and link to major topics within grades

1. In the space below, copy all of the standards related to multiplication and division of fractions and note how coherence is evident in these standards. Note also standards that are outside of the Number and Operations—Fractions domain but are related to, or in support of, fractions.

Grade	Standard	Summary of the Standard (If the standard has sub-parts, summarize each sub- part.)

2. In the space below, describe how you might use the first topic to support the second (major) topic.

Supporting	Major	How can the supporting work support the major work?
1.MD.C	1.0A	
2.MD.8	2.0A.1	
4.MD.B	4.NF.3	

## Shift Three: Rigor:

1.

Make a true statement: Rigor = \_\_\_\_\_\_ + \_\_\_\_\_\_ +

2. In your groups, discuss ways to respond to one of the following comments: "These standards are expecting that we just teach rote memorization. Seems like a step backwards to me." Or "I'm not going to spend time on fluency—it should just be a natural outcome of conceptual understanding."

The shift towards rigor is required by the Standards. Using grade 3, find and copy in the space below standards which specifically set expectations for each component of rigor.

Grade 3 standards that require \_\_\_\_\_:

Grade 3 standards that require \_\_\_\_\_:

Grade 3 standards that require \_\_\_\_\_: