

Figure 1: 4th Grade Core Mathematics Topics. These topics are those that are common to 70 percent of the official curricula and textbooks of the US ("US core") and 70 percent of other TIMSS countries ("world core"). The "US Teacher Core" are those topics reported by 70 percent of the US teachers surveyed. Asterisks show emphasized topics. Even at 4th grade, US curricula, textbooks and teachers commonly include more topics than the other TIMSS countries. All except one of the "world core" topics is included by the US and all three internationally emphasized topics are also emphasized in the US. US 4th grade mathematics includes what is common to most TIMSS countries but also enough others to make our curriculum " a mile wide and an inch deep."

World Core	US Core	US Teacher Core ¹
Whole Numbers: Meaning*	Whole Numbers: Meaning*	Whole Numbers*
Whole Numbers: Operations*	Whole Numbers: Operations*	Whole Numbers*
Whole Numbers: Properties of Operations		Whole Numbers*
Common Fractions	Common Fractions	Common Fractions
	Decimal Fractions	Decimal Fractions
		Rel. of Common & Dec. Frac.
		Prop. of Common & Dec. Frac.
		Number Theory
	Estimating Computations	Estimation and Number Sense*
Measurement Units*	Measurement Units*	Measurement Units*
Perimeter, Area, and Volume	Perimeter, Area, and Volume	Perimeter, Area, and Volume
	Meas. Estimation & Error	
	2-D Geo.: Coord. Geo.	One- and Two-Dimensional Geometry
2-D Geo.: Basics	2-D Geo.: Basics	One- and Two-Dimensional Geometry
2-D Geo.: Poly. & Circles	2-D Geo.: Poly. & Circles	One- and Two-Dimensional Geometry
	3D Geometry	
	Geometric Congruence and Similarity	Geometric Congruence and Similarity
	Geometric Transformations and Symmetry	Geometric Transformations and Symmetry
	Functions, Relations, and Patterns	Functions, Relations, and Patterns
	Equations and Formulas	
	Data Representation and Statistics	Data Representation and Statistics
	Probability	Probability

¹ Some of the framework topics were aggregated together when presented to teachers and were at a different level of specificity than presented here in the world core; therefore, the numbers in this column may represent teaching of the larger category which includes the specific topic listed here.