

Mathematics Topics Intended for Introduction in Various Stages

Certain framework topics were typically introduced at various stages of schooling: grades 1-3, 4-6, 7-8. This table presents a broad picture of the typical sequence of mathematics topics introduction (representing the aggregate and not individual countries) in the following countries: Singapore, Korea, Japan, Hong Kong, Belgium (Fl), Czech Republic, Slovak Republic, Switzerland, Netherlands, Slovenia, Bulgaria, France, Hungary, the Russian Federation, Australia, Ireland, Canada, Belgium (Fr), and Sweden. US State data are shown next to the composite data.

Topics Intended for Introduction in Each Grade Group by at least 50% of the Countries Out Performing the U.S.	Topics Intended for Introduction in Each Grade Group by at least 50% of Achieve States	Topics Intended for Introduction in Each Grade Group by at least 50% of the Countries Out Performing the U.S.	Topics Intended for Introduction in Each Grade Group by at least 50% of Achieve States
Grade 1 to 3		Grade 4 to 6	
<p>Whole Number: Meaning Whole Number: Operations Whole Numbers: Properties of Operations Common Fractions</p> <p>Estimating Quantity & Size Estimating Computations Measurement Units Perimeter, Area & Volume</p> <p>2-D Geometry: Basics 2-D Geometry: Polygons & Circles</p> <p>Equations & Formulas</p>	<p>Whole Number: Meaning Whole Number: Operations Whole Number: Properties of Operations Common Fractions Decimal Fractions Relationship of Common & Decimal Fractions Number Theory Estimating Quantity & Size Rounding & Significant Figures Estimating Computations Measurement Units Perimeter, Area & Volume Measurement Estimation & Errors 2-D Coordinate Geometry 2-D Geometry: Basics 2-D Geometry: Polygons & Circles 3-D Geometry Geometry: Transformations Geometry: Congruence & Similarity Patterns, Relations & Functions Equations & Formulas Data Representation & Analysis Uncertainty & Probability</p>	<p>Decimal Fractions Relation of Common & Decimal Fractions Percentages Properties of Common & Decimal Fractions Negative Numbers, Integers, & Their Properties Number Theory Rounding & Significant Figures Measurement: Estimation & Errors 2-D Geometry: Coordinate Geometry 3-D Geometry Geometry: Transformations Constructions using Straightedge & Compass Proportionality Concepts Proportionality Problems Patterns, Relations & Functions Data Representation & Analysis</p>	<p>Percentages Negative Numbers, Integers & Their Properties Rational Numbers & Their Properties Real Numbers, Their Subsets & Properties Exponents, Roots & Radicals Systematic Counting Exponents & Orders of Magnitude Proportionality Concepts Proportionality Problems</p>
Grade 7 to 8		Grade 7 to 8	
		<p>Rational Numbers & Their Properties Real Numbers, Subsets & Properties Exponents, Roots & Radicals Exponents & Orders of Magnitude Geometry: Congruence & Similarity Proportionality: Slope & Trigonometry Validation & Justification</p>	<p>Constructions w/ Straightedge & Compass</p>