

## FIGURE 1

### A+ Composite: Mathematics topics intended at each grade by at least two-thirds of A+ countries.

Note that topics are introduced and sustained in a coherent fashion, producing a clear upper-triangular structure.

TOPIC	GRADE:	1	2	3	4	5	6	7	8
Whole Number Meaning		■	■	■	■	■			
Whole Number Operations		■	■	■	■	■			
Measurement Units		□	■	■	■	■	■	■	
Common Fractions				□	■	■	■		
Equations & Formulas				□	■	■	■	■	■
Data Representation & Analysis				□	□	■	■		□
2-D Geometry: Basics				□	■	■	■	■	■
Polygons & Circles					■	■	■	■	■
Perimeter, Area & Volume					■	■	■	■	□
Rounding & Significant Figures					■	■			
Estimating Computations					■	■	■		
Properties of Whole Number Operations					□	■			
Estimating Quantity & Size					□	□			
Decimal Fractions					■	■	■		
Relationship of Common & Decimal Fractions					■	■	■		
Properties of Common & Decimal Fractions						■	■		
Percentages						■	■		
Proportionality Concepts						■	■	■	□
Proportionality Problems						■	■	■	■
2-D Coordinate Geometry						□	□	■	■
Geometry: Transformations							■	■	■
Negative Numbers, Integers & Their Properties							□	■	
Number Theory								■	□
Exponents, Roots & Radicals								■	■
Exponents & Orders of Magnitude								□	□
Measurement Estimation & Errors								□	
Constructions w/ Straightedge & Compass								■	□
3-D Geometry								■	■
Congruence & Similarity									■
Rational Numbers & Their Properties									□
Patterns, Relations & Functions									□
Slope & Trigonometry									□
Number of topics covered by at least 67% of the A+ countries		3	3	7	15	20	17	16	18
Number of additional topics intended by A+ countries to complete a typical curriculum at each grade level		2	6	5	1	1	3	6	3

□ – intended by 67% of the A+ countries   ■ – intended by 83% of the A+ countries   ■ – intended by 100% of the A+ countries