

MATH BACKGROUND – GRADE 6

This chart correlates the Math Background Notes in *MathLinks: Core 2nd Edition* Grade 6 to adult-level explanations of more complex grade-level concepts (column 1) and concepts beyond 6th grade that are important in 7th grade, 8th grade, and high school (columns 2-7). Ted Gamelin, Professor Emeritus UCLA Department of Mathematics, also organized these notes into broad topics of importance to mathematics. Some of his classifications are listed in columns 8-11. All Math Backgrounds are written so that teachers can improve their own knowledge of the subject.

Unit	Math Background Grade 6	Complex Grade 6 Concept	Adult explanations / examples of concepts important to middle school and the high school domains							Adult explanations that provide insight into the mathematics			
			Grade 7	Grade 8	HS: Number and Quantity	HS: Algebra	HS: Functions	HS: Geometry	HS: Statistics * Probability	Operations and Variables	Evolution / multiplicity of definitions	Clarifying definitions	Theorems, proofs, logical reasoning
1	"The Quartile" or "In the Quartile"	x	x						x		x		
1	The Tale is in the Tail	x	x						x				
2	Why is 1 neither Prime nor Composite										x		
2	The Fundamental Theorem of Arithmetic					x							x
3	Ratios are Everywhere	x	x		x		x	x					
3	Ratios and Rates	x	x	x	x		x					x	
4	Definition of Division					x					x		
4	Rules for Division of Fractions	x				x							x
5	Percent as a number and Percent of a number	x	x									x	
6	Order of Operations		x	x	x	x				x		x	
6	Variables in Algebra	x	x	x		x	x			x			
7	Independent and Dependent Variables	x	x	x			x					x	
9	Different Definitions for Quadrilaterals		x					x			x		
9	Alternate Methods for Determining Area Formulas...	x						x					x
9	Polygons	x	x	x				x				x	
9	Polyhedra	x	x	x				x				x	
9	Base, Altitude, and Height	x	x	x				x			x		
10	What is Sea Level?		x										
10	Interpreting the Minus Sign	x	x	x		x				x			
10	An Algebraic Definition of Absolute Value	x	x			x					x		