

**LAYING THE FOUNDATION / COMMON CORE STANDARDS CROSSWALK**  
**LTF Mathematics - Level Two**  
**Modules 5-8**

DRAFT



LAYING THE FOUNDATION

Building Academic Excellence

LAYING THE FOUNDATION / COMMON CORE STANDARDS CROSSWALK  
LTF Mathematics – Module Five

Grade/ Course	Lesson Title	Middle Grades		High School		Assessment
		Critical Areas:	Standards:	Critical Areas:	Standards:	
Middle Grades	<b>CAN YOU "HAND'LE" THIS AREA?</b>	Geometry	6.G.1 7.G.6			Accumulation Free Response Accumulation Multiple Choice Quiz
Middle Grades	<b>SHOE PRINT, TRAPEZOIDS, AND AREA</b>	Statistics and Probability	6.SP.3			Accumulation Free Response Accumulation Multiple Choice Quiz
Middle Grades	<b>A'PEELING PROBLEM</b>	Geometry	6.G.1 7.G.6 8.G.9			Accumulation Free Response Accumulation Multiple Choice Quiz
Algebra I	<b>INVESTIGATING AREA UNDER A CURVE</b>	Expressions and Equations Geometry	7.EE.4 6.G.1	Functions: Interpreting Functions Geometry: Expressing Geometric Properties with Equations	F-IF.2 G-GPE.7	Accumulation Free Response Accumulation Multiple Choice Quiz

Grade/ Course	Lesson Title	Middle Grades		High School		Assessment
		Critical Areas:	Standards:	Critical Areas:	Standards:	
Algebra I	<b>AMUSEMENT PARK PROBLEM</b>	Ratios and Proportional Relationships	6.RP.3.d 7.RP.1	Functions: Interpreting Functions	F-IF.5 F-IF.6	Accumulation Free Response Accumulation Multiple Choice Quiz
		Geometry	6.G.1 7.G.6	Number and Quantity: The Real Number System	N-Q.2 N-Q.3	
Geometry	<b>ACCUMULATION (GE)</b>	Ratios and Proportional Relationships	7.RP.1	Number and Quantity: The Real Number System	N-Q.1	Accumulation Free Response Accumulation Multiple Choice Quiz
		Expressions and Equations Functions	7.EE.3 8.F.1 8.F.2 8.F.5			
				Algebra: Reasoning with Equations and Inequalities	A-REI.10	
				Functions: Interpreting Functions	F-IF.2 F-IF.4 F-IF.5 F-IF.7.b F-IF.7.c	
				Geometry: Modeling with Geometry	G-MG.1	
				Statistics and Probability: Interpreting Categorical and Quantitative Data	S-ID.1	

Grade/ Course	Lesson Title	Middle Grades		High School		Assessment
		Critical Areas:	Standards:	Critical Areas:	Standards:	
Geometry	<b>ADAPTATION OF 2003 AB3</b>	Geometry	6.G.1 7.G.6	Algebra: Creating Equations	A-CED.1	Accumulation Free Response Accumulation Multiple Choice Quiz
		Functions	8.F.4	Functions: Interpreting Functions	F-IF.4	
Algebra II	<b>ACCUMULATION WITH A QUADRATIC FUNCTION</b>			Algebra: Creating Equations	A-CED.2	Accumulation Free Response Accumulation Multiple Choice Quiz
				Functions: Building Functions	F-BF.2	
Pre-Calculus	<b>ACCUMULATION (PC)</b>			Geometry: Modeling with Geometry	G-MG.2	Accumulation Free Response Accumulation Multiple Choice Quiz
				Algebra: Reasoning with Equations and Inequalities	A-REI.10	
				Algebra: Creating Equations	A-CED.2	
				Number and Quantity: The Real Number System	N-Q.1	
				Geometry: Expressing Geometric Properties with Equations	G-GPE.7	

LAYING THE FOUNDATION / COMMON CORE STANDARDS CROSSWALK
   
 LTF Mathematics – Module Six

Grade/ Course	Lesson Title	Middle Grades		High School		Assessment
		Critical Areas:	Standards:	Critical Areas:	Standards:	
Middle Grades	Movie Probability	Statistics and Probability	7.SP.5 7.SP.6	Statistics and Probability: Conditional Probability and the Rules of Probability	S-CP.1 S-CP.3	Probability Free Response Probability Multiple Choice Quiz
Middle Grades	Family Fun	Statistics and Probability	7.SP.5 7.SP.8.a 7.SP.8.b	Statistics and Probability: Conditional Probability and the Rules of Probability	S-CP.1 S-CP.5 S-CP.6	Probability Free Response Probability Multiple Choice Quiz
Algebra I	Jury	Statistics and Probability	6.SP.2 7.SP.1 7.SP.7	Statistics and Probability: Making Inferences and Justifying Conclusions	S-MD.3 S-MD.6	Probability Free Response Probability Multiple Choice Quiz
Geometry	Using Area to Estimate Probability	Statistics and Probability	7.SP.5 7.SP.7.b	Statistics and Probability: Interpreting Categorical and Quantitative Data	S-ID.3 S-CP.7 S-CP.9	Probability Free Response Probability Multiple Choice Quiz

Grade/ Course	Lesson Title	Middle Grades		High School		Assessment
		Critical Areas:	Standards:	Critical Areas:	Standards:	
Algebra II	<b>SAMPLE SPACE, BASIC COUNTING PRINCIPLES, PERMUTATIONS</b>			Statistics and Probability: Conditional Probability and the Rules of Probability  Statistics and Probability: Making Inferences and Justifying Conclusions	S-CP.1     S-MD.1 S-MD.2 S-MD.3 S-MD.4 S-MD.5 S-MD.6 S-MD.7	Probability Free Response Probability Multiple Choice Quiz
Algebra II	<b>COMBINATIONS</b>			Algebra: Arithmetic with Polynomials and Rational Expressions Statistics and Probability: Conditional Probability and the Rules of Probability	A-APR.5   S-CP.1 S-CP.2 S-CP.5 S-CP.9	Probability Free Response Probability Multiple Choice Quiz

Grade/ Course	Lesson Title	Middle Grades		High School		Assessment
		Critical Areas:	Standards:	Critical Areas:	Standards:	
Pre-Calculus	<b>APPLYING THE BINOMIAL EXPANSION TO PROBABILITIES</b>			Algebra: Arithmetic with Polynomials and Rational Expressions  Statistics and Probability: Conditional Probability and the Rules of Probability  Statistics and Probability: Making Inferences and Justifying Conclusions	A-APR.5  S-CP.6 S-CP.7 S-CP.8 S-CP.9  S-MD.1 S-MD.2 S-MD.3	Probability Free Response Probability Multiple Choice Quiz

**LAYING THE FOUNDATION / COMMON CORE STANDARDS CROSSWALK**
  
**LTF Mathematics – Module Seven**

Grade/ Course	Lesson Title	Middle Grades		High School		Assessment
		Critical Areas:	Standards:	Critical Areas:	Standards:	
Middle Grades	ANT AND THE SUGAR	Expressions and Equations	6.EE.9 7.EE.4			Position/Velocity/Acceleration Free Response Position/Velocity/Acceleration Multiple Choice Quiz
Middle Grades	ROUNDTRIP DRIVE	Functions	8.F.5			
		Ratios and Proportional Relationships	6.RP.3.a 6.RP.3.b 6.RP.3.d			Position/Velocity/Acceleration Free Response Position/Velocity/Acceleration Multiple Choice Quiz
		Number System	6.NS.6.a 6.NS.6.c 6.NS.5 6.NS.7.c 6.NS.7.d 7.NS.2.b			
		Ratios and Proportional Relationships	7.RP.1			
		Expressions and Equations	8.EE.5			
		Functions	8.F.1 8.F.2 8.F.5			



Grade/ Course	Lesson Title	Middle Grades		High School		Assessment
		Critical Areas:	Standards:	Critical Areas:	Standards:	
Middle Grades	<b>DETECTING MOTION</b>	Ratios and Proportional Relationships  Number System  Expressions and Equations  Functions   Statistics and Probability	6.RP.3.b 7.RP.2.a 7.RP.2.d  6.NS.5  6.EE.9 8.EE.5  8.F.1 8.F.2 8.F.4 8.F.5  8.SP.1 8.SP.2			Position/Velocity/Acceleration Free Response Position/Velocity/Acceleration Multiple Choice Quiz
Algebra I	<b>MOTION ADAPTED FROM 1997 CALCULUS AB1</b>			Functions: Interpreting Functions	F-IF.4 F-IF.5 F-IF.6 F-IF.7	Position/Velocity/Acceleration Free Response Position/Velocity/Acceleration Multiple Choice Quiz

Grade/ Course	Lesson Title	Middle Grades		High School		Assessment
		Critical Areas:	Standards:	Critical Areas:	Standards:	
Middle Grades	<b>STOCK CAR RACETRACKS</b>	Ratios and Proportional Relationships	6.RP.3 7.RP.2 7.RP.2	Geometry: Congruence	G-CO.6 G-CO.10	Position/Velocity/Acceleration Free Response Position/Velocity/Acceleration Multiple Choice Quiz
		Number System	6.NS.1 7.NS.2 7.NS.3	Geometry: Similarity, Right Triangles, and Trigonometry	G-SRT.5	
Algebra I	<b>READING THE GRAPH</b>	Expressions and Equations	6.EE.9 8.EE.5			Position/Velocity/Acceleration Free Response Position/Velocity/Acceleration Multiple Choice Quiz
		Geometry	6.G.3 7.G.1 7.G.2 8.G.5			
		Ratios and Proportional Relationships	7.RP.2			
		Expressions and Equations	8.EE.5	Algebra: Reasoning with Equations and Inequalities	A-REI.10 A-REI.11	
		Functions	8.F.2 8.F.4 8.F.5	Functions: Interpreting Functions	F-IF.2 F-IF.4 F-IF.6	
				Functions: Linear, Quadratic, and Exponential Models	F-LE.1.b	

Grade/ Course	Lesson Title	Middle Grades		High School		Assessment
		Critical Areas:	Standards:	Critical Areas:	Standards:	
Geometry	<b>ADAPTATION OF 2000 AB2/BC2</b>					Position/Velocity/Acceleration Free Response Position/Velocity/Acceleration Multiple Choice Quiz
Algebra II	<b>PARTICLE MOTION ALONG A HORIZONTAL LINE</b>			Number and Quantity: Vector and Matrix Quantities Algebra: Creating Equations Algebra: Reasoning with Equations and Inequalities Functions: Interpreting Functions	N-VM.1 N-VM.3 A-CED.1 A-CED.3 A-REI.3 A-REI.6 F-IF.1 F-IF.2 F-IF.3 F-IF.4 F-IF.6 F-IF.7.a	Position/Velocity/Acceleration Free Response Position/Velocity/Acceleration Multiple Choice Quiz

Grade/ Course	Lesson Title	Middle Grades		High School		Assessment
		Critical Areas:	Standards:	Critical Areas:	Standards:	
Algebra II	MOTION PROBLEMS USING EXPONENTIAL AND NATURAL LOGARITHMIC FUNCTIONS			Algebra: Creating Equations  Functions: Interpreting Functions	A-CED.1 A-CED.3  F-IF.4 F-IF.5 F-IF.8 F-BF.5 F-LE.4 F-LE.5	Position/Velocity/Acceleration Free Response Position/Velocity/Acceleration Multiple Choice Quiz
Pre-Calculus	READING THE GRAPH OF A VELOCITY FUNCTION			Functions: Interpreting Functions	F-IF.4 F-IF.5 F-IF.6 F-IF.9	Position/Velocity/Acceleration Free Response Position/Velocity/Acceleration Multiple Choice Quiz

DRAFT

**LAYING THE FOUNDATION / COMMON CORE STANDARDS CROSSWALK**  
**LTF Mathematics – Module Eight**

Grade/ Course	Lesson Title	Middle Grades	High School	Assessment	
		Critical Areas:	Standards:	Critical Areas:	Standards:
<b>Middle Grades</b>	<b>LIMITS - A PHYSICAL APPROACH</b>	Ratios and Proportional Relationships Number System  Expressions and Equations Geometry	6.RP.1 6.RP.3.d  6.NS.1 7.NS.2.a 7.NS.2.c 7.NS.3  7.EE.3  7.G.2 7.G.6 8.G.2		Limits Free Response Limits Multiple Choice Quiz
<b>Middle Grades</b>	<b>ALIEN INVASION</b>	Expressions and Equations  Geometry  Functions	6.EE.1 6.EE.9  7.G.6  8.F.2 8.F.3 8.F.5		Limits Free Response Limits Multiple Choice Quiz
<b>Middle Grades</b>	<b>INTERESTING LIMIT</b>	Ratios and Proportional Relationships Statistics and Probability	6.RP.3 7.RP.2  8.SP.1		Limits Free Response Limits Multiple Choice Quiz

Grade/ Course	Lesson Title	Middle Grades		High School		Assessment
		Critical Areas:	Standards:	Critical Areas:	Standards:	
Middle Grades	<b>ARITHMETIC SEQUENCES</b>	Ratios and Proportional Relationships Number System	6.RP.3  6.NS.6 7.NS.1			Limits Free Response Limits Multiple Choice Quiz
Middle Grades	<b>ANGLES OF A REGULAR POLYGON</b>	Expressions and Equations  Functions	6.EE.9 8.EE.6 8.EE.7  8.F.1 8.F.2 8.F.3			Limits Free Response Limits Multiple Choice Quiz
Middle Grades	<b>POLYGONS IN CIRCLES</b>	Geometry  Ratios and Proportional Relationships Expressions and Equations Geometry  Number System	7.G.1 7.G.5 8.G.5  6.RP.3.c  6.EE.2.c  6.G.1 7.G.4  7.NS.1 7.NS.1.d 7.NS.2.c			Limits Free Response Limits Multiple Choice Quiz  Limits Free Response Limits Multiple Choice Quiz

Grade/ Course	Lesson Title	Middle Grades		High School		Assessment
		Critical Areas:	Standards:	Critical Areas:	Standards:	
Algebra I	EXPONENTIAL FUNCTIONS EXPLORATION			Algebra: Creating Equations	A-CED.1	Limits Free Response Limits Multiple Choice Quiz
				Functions: Interpreting Functions	F-IF.2 F-IF.4	
Geometry	POLYGONS I			Functions: Building Functions	F-BF.1.a	Limits Free Response Limits Multiple Choice Quiz
				Number and Quantity: The Real Number System	N-Q.1 N-Q.3	
				Algebra: Seeing Structure in Expression	A-SSE.1	
				Functions: Trigonometric Functions	F-TF.3	
				Geometry: Similarity, Right Triangles, and Trigonometry	G-SRT.5 G-SRT.6 G-SRT.8 G-SRT.11	
				Geometry: Circles	G-C.2	
				Geometry: Geometric Measurement and Dimension	G-GMD.1	

Grade/ Course	Lesson Title	Middle Grades		High School		Assessment
		Critical Areas:	Standards:	Critical Areas:	Standards:	
Geometry	POLYGONS II			Algebra: Creating Equations Algebra: Reasoning with Equations and Inequalities Geometry: Circles Functions: Interpreting Functions Functions: Building Functions Functions: Linear, Quadratic, and Exponential Models	A-CED.1 A-REI.10 G-C.2 F-IF.4 F-IF.7.c F-IF.7.d F-BF.1.a F-LE.1.b F-LE.1.c	Limits Free Response Limits Multiple Choice Quiz
Geometry	INVESTIGATING THE SLOPE OF A TANGENT LINE			Algebra: Seeing Structure in Expression Algebra: Arithmetic with Polynomials and Rational Expressions Algebra: Creating Equations Algebra: Reasoning with Equations and Inequalities	A-SSE.1 A-APR.3 A-APR.6 A-CED.1 A-REI.2 A-REI.4.b	Limits Free Response Limits Multiple Choice Quiz



Grade/ Course	Lesson Title	Middle Grades		High School		Assessment
		Critical Areas:	Standards:	Critical Areas:	Standards:	
Pre-Calculus	<b>RATIONAL FUNCTIONS AND THEIR ASYMPTOTES</b>			Functions: Linear, Quadratic, and Exponential Models  Algebra: Seeing Structure in Expression  Algebra: Arithmetic with Polynomials and Rational Expressions	F-LE.2 F-LE.5  A-SSE.3.a  A-APR.3	Limits Free Response Limits Multiple Choice Quiz

DRAFT