

**Rice University School Mathematics Project
Curriculum – Summer Campus Program 2003**

Mathematical Concepts						Processes
	Number & Operations	Patterns, Functions, & Algebra	Geometry & Spatial Sense	Measurement	Data Analysis & Statistics Probability	
Pre K – 2	<ul style="list-style-type: none"> • Whole number concepts & operations • Numeration • Place value 	<ul style="list-style-type: none"> • Balance & equalities 	<ul style="list-style-type: none"> • Shapes & their properties 	<ul style="list-style-type: none"> • Standard & non-standard systems • Time & temperature 	<ul style="list-style-type: none"> • Chance 	<p>Concept Sequencing</p>
3 - 4	<ul style="list-style-type: none"> • Whole number concepts & operations • Fraction concepts & operations 	<ul style="list-style-type: none"> • Factors & multiples • Patterns 	<ul style="list-style-type: none"> • Plane figures • Congruence, similarity • Transformations 	<ul style="list-style-type: none"> • Measurement systems • Perimeter, area 	<ul style="list-style-type: none"> • Simple probability • Interpretative data 	<p>Problem Solving Reasoning & Proof Communicating Connecting Representing</p>
5 - 6	<ul style="list-style-type: none"> • Fractions, decimals, percents, concepts & operations • Integer concepts & operations 	<ul style="list-style-type: none"> • Variable • Patterns 	<ul style="list-style-type: none"> • Polygons • Transformations • Spatial geometry 	<ul style="list-style-type: none"> • Perimeter, area, volume • Measurement systems 	<ul style="list-style-type: none"> • Central tendency • Theoretical & experimental probability 	
7 - Algebra I	<ul style="list-style-type: none"> • Ratio & proportion • Integer concepts & operations 	<ul style="list-style-type: none"> • Polynomials • Slope • Linear & non-linear functions 	<ul style="list-style-type: none"> • Area, surface area, perimeter, volume • Logic • Nets • Transformations • Pythagorean Theorem 	<ul style="list-style-type: none"> • Area, surface area, perimeter, volume • Pythagorean Theorem 	<ul style="list-style-type: none"> • Statistics • Theoretical & experimental probability 	
Geometry and Above	<ul style="list-style-type: none"> • Limits • Direct & inverse variation • Proportionality 	<ul style="list-style-type: none"> • Parent functions • Transformations • Rate of change • Function development & application • Proportionality 	<ul style="list-style-type: none"> • Proportionality • Area • Pythagorean Theorem • Logic 	<ul style="list-style-type: none"> • Perimeter, area, volume • Circumference • Precision • Indirect measurement 	<ul style="list-style-type: none"> • Mathematical models • Regression analysis • Residual analysis 	