

**Rice University School Mathematics Project
Curriculum – Summer Campus Program 2005**

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"> • Sorting by attributes • Patterns and relationships 	<ul style="list-style-type: none"> • Shapes & their properties 	<ul style="list-style-type: none"> • Non-standard measurement systems 	<ul style="list-style-type: none"> • Simple probability • Interpreting data 	Concept Sequencing
3 - 4	<ul style="list-style-type: none"> • Whole number concepts & operations • Fraction and decimal concepts & operations 	<ul style="list-style-type: none"> • Factors & multiples • Patterns 	<ul style="list-style-type: none"> • Plane figures • Congruence, similarity • Transformations • Solid figures 	<ul style="list-style-type: none"> • Measurement systems • Perimeter, area 	<ul style="list-style-type: none"> • Simple probability • Interpretative data 	Problem Solving Reasoning & Proof Communicating Connecting Representing
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 • Proportionality • Parametrics 	<ul style="list-style-type: none"> • Parent functions • Transformations • Rate of change • Function development & application • Proportionality • Asymptotes • Trigonometry • Sequences and Series 	<ul style="list-style-type: none"> • Proportionality • Area • Pythagorean Theorem • Logic • Transformations • Polygon Properties • Van Hiele levels • Angles • Parallel Lines 	<ul style="list-style-type: none"> • Perimeter, area, volume • Circumference 	<ul style="list-style-type: none"> • Mathematical models • Regression analysis 	