Curriculum Night: 8th Grade Mathematics Mr Norcross

Willows Preparatory School 2017-18

I.B. Learning Aims & Goals
• Develop confidence, perseverance and independence in Mathematical thinking and problem solving. • Communicate confidently and clearly in a variety of contexts. • Appreciate the contribution of Mathematics in other areas • Reflect critically and constructively on your work and the work of others.

I.B. Learning Objectives	*I.B. Grading Criteria*
IB learning objectives are determined across four objective criterion: • Objective A: Knowing and Understanding • Objective B: Investigating Patterns • Objective C: Communicating • Objective D: Apply Mathematics in Context	Students will receive a local grade which is percentage based and letter referenced. Additionally all IB objective criterion will be formally assessed twice throughout the year. These will be informally assessed on a continual basis. The success in the objective criterion is measured on a 0-8 scale. Limited competency is graded 1-2, adequate 3-4, substantial 5-6 and excellent 7-8. Further detail, specific to Mathematics, regarding the grade descriptors is available in OneNote A cumulative score is calculated for the year using the criterion scores and this is referenced on a scale of 1-7.

The following is an outline of the content for the 8th Grade Mathematics Course. Number work will be studied intermittently throughout the year as an application that supports the academic Mathematics. Number work includes integers and other number sets including irrational numbers, exponents, special number sets, fractions, decimals, percentages, ratio, rounding and estimating, scientific notation and arithmetic.
Trimester 1 Surds, working with expressions, expansion and factoring, linear equations, algebraic fractions, properties of linear functions and linear graphs, quadratic expressions, functions and graphs, simultaneous equations, proportion
Trimester 2 Quadratic graphs and their properties, non-linear simultaneous equations, exponential and rational functions, similarity for 2D and 3D figures, deductive geometry in the circle, vectors
Trimester 3 Trig graphs and trig rules, central tendency and the five-figure summary, data modelling and presentation