



6th Grade Mathematics

Willows Preparatory School 2019-20

Subject Aims

- Develop confidence, perseverance and independence in mathematical and critical thinking and problem solving.
- Communicate confidently and clearly in a variety of contexts.
- Appreciate the contribution of mathematics in other areas and practice the application of it in the sciences, art, and design.
- Reflect critically and constructively on your work and the work of others.
- Nurture the skills and knowledge required for students to take their studies in mathematics beyond the MYP.

Keys to Class

- Haese Mathematics – Our textbook is from the Haese Mathematics series. Sixth grade uses book 7, MYP 2.
- OneNote – All lessons, in-class warm-ups, resources, syllabus, homework, and assignment log are on OneNote and updated daily.
- Homework – Daily, short, homework assignments are used to complement classroom practice and encourage independent work.
- Discussion and Participation – A big component of learning will come from exposition, discussion and clarification in class, and team-building activities to engage students.

Objective Criterion

Objective A: Knowing and Understanding	Do we have access to a selection methods, processes and techniques? Can we apply them to challenging and unfamiliar problems?
Objective B: Investigating Patterns	Can we generalize patterns and investigate their properties?
Objective C: Communicating	Can we link together the different forms of Maths to produce accurate, coherent solutions?
Objective D: Apply Mathematics in Context	How do we identify what is relevant? Can we justify our answers and reflect on the accuracy of our solutions?

Content Brief

Trimester 1	Trimester 2	Trimester 3
<p>Number System - Order of Operations with Exponents and Integers, Divisibility, Factors, Multiples, Prime and Composite Numbers, Roots</p> <p>Algebraic Expressions – Writing and Operations with Algebraic Expressions Algebraic Equations - Solving Two-Step and Multi-Step Equations</p>	<p>Coordinate Geometry - Cartesian Coordinates, Plotting Points, Graphing Straight Lines, Graphing Vertical and Horizontal Lines, Equation of a Straight Line</p> <p>Ratios, Rates, Direct and Inverse Proportions</p>	<p>Geometry - Points and Lines, Measuring and Classifying Angles, Angle Pairs, Parallel Lines, Geometric Constructions</p> <p>Transformations, Symmetry, Polygons, Interior and Exterior Angles of a Polygon</p> <p>Plane Figures, Area of Plane Figures, Solids, Nets of Solids, Surface Area and Volume of Solids</p>