

The Dragon Academy – Course Syllabus 2007-2008

FORM 1 - Math Instructor: A. Ferraro A.O.C.A.D.

Grade 7 Curriculum

The following are highlights of student learning in Grade 7. They are provided to give parents a quick overview of the mathematical knowledge and skills that students are expected to acquire in each strand in this grade.

Number Sense and Numeration: representing and ordering decimals (to hundredths), fractions, and integers; representing squares and square roots; dividing whole numbers by simple fractions and decimals; adding and subtracting simple fractions and integers; multiplying and dividing decimal numbers to thousandths by one-digit whole numbers; applying order of operations in expressions with brackets; relating fractions, decimals, and percents; solving problems involving whole-number percents and unit rates

Measurement: converting between metric units, including converting between square centimetres and square metres; developing the area relationship for a trapezoid; developing and applying the formula for the volume of a prism; determining and applying surface-area relationships for prisms; relating millilitres and cubic centimetres

Geometry and Spatial Sense: constructing parallel, perpendicular, and intersecting lines; sorting and classifying triangles and quadrilaterals by geometric properties; constructing angle bisectors and perpendicular bisectors; investigating relationships among congruent shapes; relating enlarging and reducing to similar shapes; comparing similar and congruent shapes; performing and describing dilatations; tiling a plane; plotting points in all four quadrants

Patterning and Algebra: representing linear growing patterns; representing patterns algebraically; modelling real-life relationships involving constant rates graphically and algebraically; translating phrases, using algebraic expressions; finding the term in a pattern algebraically when given any term number; solving linear equations using concrete materials or inspection and guess and check

Data Management and Probability: collecting and organizing categorical, discrete, and continuous data; displaying data in relative frequency tables and circle graphs; identifying bias in data; relating changes in data to changes in central tendency; making inferences based on data; investigating real-world applications of probability; determining the theoretical probability of two independent events

TEXT

The primary teaching resource for this course is the Text Saxon Math 87 An Incremental Development. Third Edition Saxon Publishers.