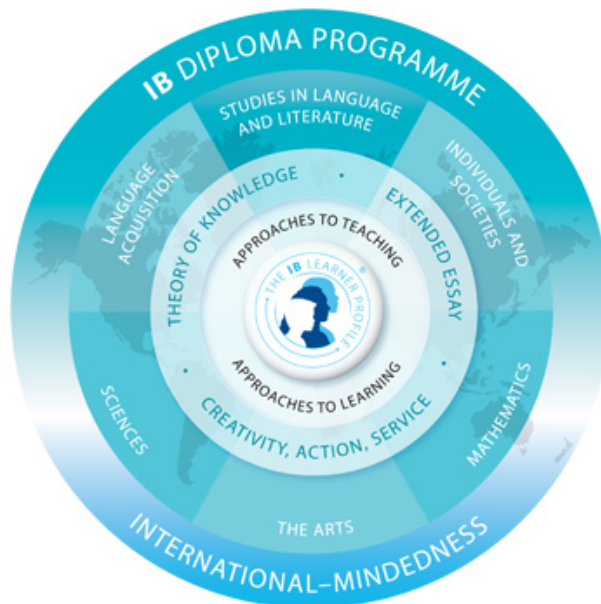# Grade 7 Curriculum
MYP

K International School Tokyo

Dear KIST Community,

This new document contains details of what the school aims to teach students in each subject in each grade level of Secondary School. The information in this "horizontal" curriculum document e.g. KIST Grade 6 Curriculum Guide, or KIST Grade 7 Curriculum Guide, is taken from the "vertical" KIST Subject Curriculum Guide e.g. G6-10 MYP Math Curriculum Guide. The subject curriculum guides also contain extra information about the subject that may be of interest to members of the community.

Each subject in the grade level curriculum guide has two main sections:

- A brief curriculum overview of the main subject knowledge topics and skills that the school aims to teach in the MYP between grade 6 and 10
- Directly after, a list of the detailed learning student outcomes for the subject for that grade level.

Be aware that the format and length of the information may be slightly different from subject to subject. This recognizes the different nature of the subjects and also that some subjects e.g. Math or English meet more times a week than PE or the Arts.

The aim of the document is to give parents an awareness in detail of what the school aims to teach your child this year. Please let me know if you have any feedback!

Mark Cowe mark.cowe@kist.ed.jp

Secondary School Principal.

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					• Review of topics in preparation for the IGCSE Math A exam

K. International School Tokyo – Mathematics Extended Level Scope and Sequence – Grades 6 – 10

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Geometry and Trigonometry (Extended)	• 7.2: Angles and Lines • 7.17: Circles • 8.9: The Geometry of Polygons • 8.11: Length and Area • 7.16: Solids • 8.13: Further Measurement • 8.25 (old): Loci	• 9.7: Measurement • 9.20: Congruence and Similarity • 9.16: Transformation Geometry • 9.13: Trigonometry	• 10.12: Trigonometry • 10.7: Congruence and Similarity • 10.19: Deductive Geometry (supplement 10.7 & 10.19 with proofs from P5.11 & P5.13) • 10.8: Transformation Geometry	• 9.7: (review of measurement) • 10.17: Vectors	• 7: Scalar and Vector Quantities • 8: Rectangular Cartesian Coordinates • 10: Trigonometry
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				• Review of topics in preparation for the IGCSE Math B exam	• Review of topics in preparation for the IGCSE Further Pure exam

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K. International School Tokyo – Mathematics Standard Level Scope & Sequence (Grade 7)
Textbook: Mathematics for the International Student 8 (MYP 3) (2nd edition)

Branch 1 – Number

Number – 8.1
- understand negative numbers as positions on a number line; order, add and subtract integers in context (7.2.2)
- add, subtract, multiply and divide integers (8.2.2)
- recognise and use multiples, factors, primes (less than 100), common factors, highest common factors and lowest common multiples in simple cases; use simple tests of divisibility (7.2.2)
- understand and use the rules of arithmetic and inverse operations in the context of positive integers and decimals (7.2.4)
- use the order of operations, including brackets (7.2.4)
- recall number facts, including positive integer complements to 100 and multiplication facts to 10 × 10, and quickly derive associated division facts (7.2.5)
- check results by considering whether they are of the right order of magnitude and by working problems backwards (7.2.8)
- use the order of operations, including brackets, with more complex calculations (8.2.4)
- use squares, positive and negative square roots, cubes and cube roots, and index notation for small positive integer powers (7.2.2)
- Order of operations including powers (BIDMAS*) (A.1.1)
- The ordinary processes of number manipulation (B.1)

Fractions, Decimals, and Percentage – 8.3, 8.5
- understand and use decimal notation and place value; multiply and divide integers and decimals by10, 100, 1000, and explain the effect (7.2.1)
- read and write positive integer powers of 10; multiply and divide integers and decimals by 0.1, 0.01 (8.2.1)
- compare and order decimals in different contexts; know that when comparing measurements the units must be the same (7.2.1)
- round positive whole numbers to the nearest 10, 100 or 1000, and decimals to the nearest whole number or one decimal place (7.2.1)
- round positive numbers to any given power of 10; round decimals to the nearest whole number or to one or two decimal places (8.2.1)
- make and justify estimates and approximations of calculations (7.2.5)
- use efficient written methods to add and subtract whole numbers and decimals with up to two places (7.2.6)
- multiply and divide three-digit by two-digit whole numbers; extend to multiplying and dividing decimals with one or two places by single-digit whole numbers (7.2.6)
- recognise that a recurring decimal is a fraction; use division to convert a fraction to a decimal; order fractions by writing them with a common denominator or by converting them to decimals (8.2.3)
- make and justify estimates and approximations of calculations (8.2.5)
- use efficient written methods to add and subtract integers and decimals of any size, including numbers with differing numbers of decimal places (8.2.6)
- use efficient written methods for multiplication and division of integers and decimals, including by decimals such as 0.6 or 0.06; understand where to position the decimal point by considering equivalent calculations
- use rounding to make estimates and to give solutions to problems to an appropriate degree of accuracy (9.2.1)
- understand the equivalence of simple algebraic fractions; know that a recurring decimal is an exact fraction (9.2.3)
- recognise the equivalence of percentages, fractions and decimals (7.2.3)
- strengthen and extend mental methods of calculation to include decimals, fractions and percentages, accompanied where appropriate by suitable jottings; solve simple problems mentally (7.2.5)
- recall equivalent fractions, decimals and percentages; use known facts to derive unknown facts, including products involving numbers such as 0.7 and 6, and 0.03 and 8 (8.2.5)
- strengthen and extend mental methods of calculation, working with decimals, fractions, percentages, squares and square roots, cubes and cube roots; solve problems mentally (8.2.5)
- recognise when fractions or percentages are needed to compare proportions; solve problems involving percentage changes (9.2.3)
- interpret percentage as the operator 'so many hundredths of' and express one given number as a percentage of another; calculate percentages and find the outcome of a given percentage increase or decrease (8.2.3)
- understand the order of precedence of operations, including powers (9.2.4)
- Increasing or decreasing quantities by a given percentage (A.1.6)
- Finding 100 per cent when another percentage is given (A.1.6)
- Calculating percentage increases or decreases (percentage profit or loss) (A.1.6)
- Understanding the multiplicative nature of percentages as operators (A.1.6)
- Solving reverse percentage problems by carrying out an appropriate division (A.1.6)
- Writing decimal numbers to the nearest whole number and to one or two decimal places (A.1.8)
- Applying the four rules of operation with decimals (A.1.10)
- Converting simple fractions to decimals including recurring decimals (A.1.2)
- Converting terminating decimals to fractions (A.1.3)
- Converting between fractions and decimals (A.1.2)
- Rounding numbers to one, two or three decimal places (A.1.8)
- Fractions, decimals, ratio, proportion and percentage (B.1)
- Understanding that percentage means 'number of parts per hundred' (A.1.6)
- Converting between percentages, fractions and decimals (A.1.6)
- Calculating percentages of quantities (A.1.6)
- Expressing one quantity as a percentage of another (A.1.6)

Radicals and Pythagoras – 8.10
- use squares, positive and negative square roots, cubes and cube roots, and index notation for small positive integer powers (7.2.2)
- investigate Pythagoras' theorem, using a variety of media, through its historical and cultural roots, including 'picture' proofs (9.4.1)
- use ICT to explore constructions of triangles and other 2-D shapes (9.4.3)
- Understanding and using Pythagoras' theorem in 2-D to find the length of the hypotenuse or that of one of the shorter sides of a right-angled triangle (A.4.8)

- Using Pythagoras' theorem to solve problems (A.4.8)
- Using Pythagoras' theorem in 3-D (A.4.8)
- Use of Pythagoras' theorem in 2D and 3D (B.6)

Need to supplement triangle numbers 8.25.1 old book

Branch 2 – Algebra

Operations and Expansion – 8.4, 8.7

- use letter symbols to represent unknown numbers or variables; know the meanings of the words term, expression and equation (7.3.1)
- understand that algebraic operations follow the rules of arithmetic (7.3.1)
- simplify linear algebraic expressions by collecting like terms; multiply a single term over a bracket (integer coefficients) (7.3.1)
- understand that algebraic operations, including the use of brackets, follow the rules of arithmetic; use index notation for small positive integer powers (8.3.1)
- simplify or transform linear expressions by collecting like terms; multiply a single term over a bracket (8.3.1)
- The basic processes of algebra (B.3)
- Multiplying a single term over a bracket (A.2.2)
- Finding and simplifying the product of two linear expressions, eg (2x + 3)(3x – 1), (3x – 2y)(5x + 3y) (A.2.2)
- Adding and subtracting algebraic fractions, including simplifying algebraic fractions by cancelling common factors (A.2.2)
- Substituting positive and negative numbers, then fractions and decimals, into expressions, word formulae and algebraic formulae (A.2.3)
- Using formulae from mathematics, and other subjects, expressed initially in words or diagrammatic form and converting to variables or algebraic form (A.2.3)
- Substituting positive and negative numbers into expressions and formulae with quadratic and/or cubic terms (A.2.1)

Equations – 8.8, 8.15

- construct and solve simple linear equations with integer coefficients (unknown on one side only) using an appropriate method (e.g. inverse operations) (7.3.1)
- construct and solve linear equations with integer coefficients (unknown on either or both sides, without and with brackets) using appropriate methods (e.g. inverse operations, transforming both sides in same way) (8.3.1)
- use formulae from mathematics and other subjects; substitute integers into simple formulae, including examples that lead to an equation to solve; substitute positive integers into expressions involving small powers e.g. $3x$, + 4 or $2x$.; derive simple formulae (8.3.1)
- Understanding and use of 'balancing' methods (A.2.4)
- Solving simple linear equations (A.2.4)
- Solving linear equations with two or more operations, the unknown on both sides, with brackets, with negative or fractional coefficients, with combinations of these (A.2.4)
- Setting up and solving simple linear equations to solve problems, including finding the value of a variable which is not the subject of the formula (A.2.4)
- Solving simple simultaneous linear equations, including cases where one or both of the equations must be multiplied (A.2.6)
- Interpreting the equations as lines and their common solution as the point of intersection (A.2.6)
- Solution of linear simultaneous equations in two unknowns (B.3)

Factoring – 8.19 (sections A & B)

- Factorising by taking out a single common factor (A.2.2)
- The factorisation of simple algebraic expressions (B.3)

Coordinate Geometry – 8.14

- recognise that equations of the form $y = mx + c$ correspond to straight-line graphs (8.3.2)
- generate points and plot graphs of linear functions, where y is given implicitly in terms of x (e.g. $ay + bx = 0$, $y + bx + c = 0$), on paper and using ICT; find the gradient of lines given by equations of the form $y = mx + c$, given values for m and c (9.3.2)
- construct functions arising from real-life problems and plot their corresponding graphs; interpret graphs arising from real situations, e.g. time series graphs (9.3.2)

Branch 3 – Geometry and Trigonometry

Polygons, Similarity, and Congruence – 8.9, 8.18

- know that if two 2-D shapes are congruent, corresponding sides and angles are equal (8.4.1)
- understand congruence and explore similarity (9.4.1)
- distinguish between conventions, definitions and derived properties (9.4.1)
- explain how to find, calculate and use: the sums of the interior and exterior angles of quadrilaterals, pentagons and hexagons, the interior and exterior angles of regular polygons (9.4.1)
- solve problems using properties of angles, of parallel and intersecting lines, and of triangles and other polygons, justifying inferences and explaining reasoning with diagrams and text (9.4.1)
- Using three-figure bearings to specify direction (A.4.4)
- Using parallel lines, alternate angles and corresponding angles (A.4.1)
- Using the angle sum of a triangle to calculate angles in triangles (A.4.1)
- Using angle properties of isosceles, equilateral and right-angled triangles (A.4.1)
- Understanding that the exterior angle of a triangle is equal to the sum of the interior angles at the other two vertices (A.4.1)
- Using the angle sum of a quadrilateral to calculate angles in quadrilaterals (A.4.2)
- Understanding and using the properties of the parallelogram, rectangle, square, rhombus, trapezium and kite (A.4.2)
- Calculating and using the sums of the interior angles of polygons (A.4.2)
- Calculating and using the sum of the exterior angles of polygons (A.4.2)

- Calculating the interior and exterior angles of regular polygons (A.4.2)

Area, Volume and 3D Objects – 8.11, 8.13, 7.16

- know and use the formula for the area of a rectangle; calculate the perimeter and area of shapes made from rectangles (7.4.4)
- derive and use formulae for the area of a triangle, parallelogram and trapezium; calculate areas of compound shapes (8.4.4)
- know the definition of a circle and the names of its parts; explain why inscribed regular polygons can be constructed by equal divisions of a circle (9.4.1)
- know and use the formulae for the circumference and area of a circle (9.4.4)
- use ruler and protractor to construct simple nets of 3-D shapes, e.g. cuboid, regular tetrahedron, square-based pyramid, triangular prism (7.4.3)
- use 2-D representations to visualize 3-D shapes and deduce some of their properties (7.4.3)
- calculate the surface area of cubes and cuboids (7.4.4)
- visualise 3-D shapes from their nets; use geometric properties of cuboids and shapes made from cuboids; use simple plans and elevations (8.4.1)
- know and use the formula for the volume of a cuboid; calculate volumes and surface areas of cuboids and shapes made from cuboids (8.4.4)
- visualise and use 2-D representations of 3-D objects; analyse 3-D shape through 2-D projections, including plans and elevations (9.4.1)
- solve problems involving measurements in a variety of contexts; convert between area measures (e.g. mm^2 to cm^2, cm^2 to m^2, and vice versa) and between volume measures (e.g. mm^3 to cm3, cm^3 to m^3, and vice versa) (9.4.4)*
- calculate the surface area and volume of right prisms (9.4.4)*
- Finding the areas of rectangles, triangles, parallelograms and trapezia, using relevant formulae (A.4.9)
- Finding circumferences and areas of circles using relevant formulae (A.4.9)
- Finding the areas of compound shapes made from rectangles and triangles (A.4.9)
- Finding perimeters and areas of sectors of circles (A.4.9)
- Length of an arc, area of a sector of a circle (B.7)
- Understanding the terms face, edge and vertex in the context of a 3-D solid (A.4.9)

Need to supplement Loci – 8.25 old H & H

- use straight edge and compasses to construct: the midpoint and perpendicular bisector of a line segment, the bisector of an angle the perpendicular from a point to a line, the perpendicular from a point on a line a triangle, given three sides (SSS) (8.4.3)
- use ICT to explore these constructions (8.4.3)
- find simple loci, both by reasoning and by using ICT, to produce shapes and paths, e.g. an equilateral triangle (8.4.3)
- find the locus of a point that moves according to a simple rule, both by reasoning and by using ICT(9.4.3)

Transformations –7.19 + 6.16 (Section D + E – Enlargements and Tessellations)

- understand and use the language and notation associated with enlargement; enlarge 2-D shapes, given a centre of enlargement and a positive integer scale factor; explore enlargement using ICT (8.4.2)
- make scale drawings (8.4.2) - understand and use the language and notation associated with reflections, translations and rotations (7.4.2)
- recognise and visualise the symmetries of a 2-D shape (7.4.2)
- transform 2-D shapes by: reflecting in given mirror lines, rotating about a given point, translating (7.4.2)
- explore these transformations and symmetries using ICT(7.4.2)
- use conventions and notation for 2-D coordinates in all four quadrants; find coordinates of points determined by geometric information (7.4.2)
- identify all the symmetries of 2-D shapes (8.4.2)
- transform 2-D shapes by rotation, reflection and translation, on paper and using ICT (8.4.2)
- try out mathematical representations of simple combinations of these transformations (8.4.2)
- identify reflection symmetry in 3-D shapes (9.4.2)
- recognise that translations, rotations and reflections preserve length and angle, and map objects on to congruent images (9.4.2)
- explore and compare mathematical representations of combinations of translations, rotations and reflections of 2-D shapes, on paper and using ICT (9.4.2)
- use the coordinate grid to solve problems involving translations, rotations, reflections and enlargements (9.4.2)
- enlarge 2-D shapes, given a centre of enlargement and a positive integer scale factor, on paper and using ICT; identify the scale factor of an enlargement as the ratio of the lengths of any two corresponding line segments; recognise that enlargements preserve angle but not length, and understand the implications of enlargement for perimeter (9.4.2)
- use and interpret maps and scale drawings in the context of mathematics and other subjects (9.4.2)

Branch 4 – Statistics and Probability

Statistics – 8.20

- suggest possible answers, given a question that can be addressed by statistical methods (7.5.1)
- discuss a problem that can be addressed by statistical methods and identify related questions to explore (8.5.1)
- decide which data would be relevant to an enquiry and possible sources (7.5.1)
- decide which data to collect to answer a question, and the degree of accuracy needed; identify possible sources; consider appropriate sample size (8.5.1)
- plan how to collect and organize small sets of data from surveys and experiments: design data collection sheets or questionnaires to use in a simple survey, construct frequency tables for gathering discrete data, grouped where appropriate in equal class intervals (7.5.1)
- plan how to collect the data; construct frequency tables with equal class intervals for gathering continuous data and two-way tables for recording discrete data (8.5.1)
- collect small sets of data from surveys and experiments, as planned (7.5.1)
- collect data using a suitable method (e.g. observation, controlled experiment, data logging using ICT) (8.5.1)
- calculate statistics for small sets of discrete data: find the mode, median and range, and the modal class for grouped data, calculate the mean, including from a simple frequency table, using a calculator for a larger number of items (7.5.2)

- calculate statistics for sets of discrete and continuous data, including with a calculator and spreadsheet; recognise when it is appropriate to use the range, mean, median and mode and, for grouped data, the modal class (8.5.2)
- construct, on paper and using ICT, graphs and diagrams to represent data, including: bar-line graphs, frequency diagrams for grouped discrete data, simple pie charts (7.5.2)
- construct graphical representations, on paper and using ICT, and identify which are most useful in the context of the problem. Include: pie charts for categorical data, bar charts and frequency diagrams for discrete and continuous data, simple line graphs for time series, simple scatter graphs, stem-and-leaf diagrams (8.5.2)
- interpret diagrams and graphs (including pie charts), and draw simple conclusions based on the shape of graphs and simple statistics for a single distribution (7.5.3)
- interpret tables, graphs and diagrams for discrete and continuous data, relating summary statistics and findings to the questions being explored (8.5.3)
- compare two simple distributions using the range and one of the mode, median or mean (7.5.3)
- compare two distributions using the range and one or more of the mode, median and mean (8.5.3)
- write a short report of a statistical enquiry, including appropriate diagrams, graphs and charts, using ICT as appropriate; justify the choice of presentation (7.5.3)
- write about and discuss the results of a statistical enquiry using ICT as appropriate; justify the methods used (8.5.3)

Extension –Problem Solving– 8.17

Extension – Introduction to Networks – 8.23

K. International School Tokyo – Mathematics Extended Level Scope & Sequence (Grade 7)
Textbook: Mathematics for the International Student 9 (MYP 4) (2nd edition)

Branch 1 – Number

Indices – 9.2
- use squares, positive and negative square roots, cubes and cube roots, and index notation for small positive integer powers (7.2.2)
- extend knowledge of integer powers of 10; recognise the equivalence of 0.1, 1/10 and 10^{-1}; multiply and divide by any integer power of 10 (9.2.1)
- use index notation for integer powers; know and use the index laws for multiplication and division of positive integer powers (9.2.2)
- use index notation for integer powers and simple instances of the index laws (9.3.1)
- Squares and square roots (A.1.4)
- Cubes and cube roots (A.1.4)
- Powers of numbers – using index notation (A.1.4)
- Indices, powers and roots (B.1)
- Using prime factors to evaluate Highest Common Factors (HCF) and Lowest Common Multiples (LCM) (A.1.4)
- Understanding and using powers which are zero, negative or fractions (A.1.4)
- Recognising the relationship between fractional powers and roots (A.1.4)
- Using laws of indices to simplify and evaluate numerical expressions involving integer, fractional and negative powers (A.1.4)
- Expressing numbers in standard form (A.1.9)
- Writing numbers expressed in standard form as ordinary numbers (A.1.9)
- Calculating with numbers in standard form (A.1.9)
- Solving problems involving standard form (A.1.9)
- Using index notation for positive integer powers (A.2.1)
- Using index notation with positive, negative and fractional powers to simplify expressions (A.2.1)
- Numbers in standard form (B.1)

Branch 2 – Algebra

Expansion, Fractions, Formula, and Proportion – 9.4, 9.11, 9.15, 9.24
- distinguish the different roles played by letter symbols in equations, identities, formulae and functions (9.3.1)
- simplify or transform algebraic expressions by taking out single-term common factors; add simple algebraic fractions (9.3.1)
- use graphs and set up equations to solve simple problems involving direct proportion (8.3.1)
- use algebraic methods to solve problems involving direct proportion; relate algebraic solutions to graphs of the equations; use ICT as appropriate (9.3.1)
- use formulae from mathematics and other subjects; substitute numbers into expressions and formulae; derive a formula and, in simple cases, change its subject (9.3.1)
- Using direct proportion, including recipes and currency conversion (A.1.7)
- Weights, measures and money (B.1)
- Deriving formulae (A.2.3)
- Manipulating formulae to change the subject, including cases where the subject occurs twice or where a power of the subject appears (A.2.3)
- Inverse operations (A.2.4)
- The construction, interpretation and use of formulae and their manipulation (B.3)

Equations – 9.6, 9.19B-D
- construct and solve linear equations with integer coefficients (with and without brackets, negative signs anywhere in the equation, positive or negative solution) (9.3.1)
- use systematic trial and improvement methods and ICT tools to find approximate solutions to equations such as $x^2 + x = 20$ (9.3.1)
- Understanding and using the symbols $>, <, \geq, \leq$ (A.2.8)
- Understanding and using the convention for open and closed intervals on a number line (A.2.8)
- Solving simple linear inequalities in one variable, including 'double-ended' inequalities* (A.2.8)
- Solving simple linear inequalities in one variable (A.2.8)
- Representing on a number line the solution set of simple linear inequalities (A.2.8)
- Finding the integer solutions of simple linear inequalities* (A.2.8)
- Solving simple simultaneous linear equations, including cases where one or both of the equations must be multiplied (A.2.6)
- Interpreting the equations as lines and their common solution as the point of intersection (A.2.6)
- Solution of linear simultaneous equations in two unknowns (B.3)
* Supplement with (Edexcel Book 1 – Algebra Unit 2)

Quadratic Factorization and Equations – 9.9, 9.18A
- Factorising by taking out a single common factor (A.2.2)
- Factorising quadratic expressions, including the difference of two squares (A.2.2)
- Solving quadratic equations of the form $x^2 = k$ (A.2.7)

Coordinate Geometry – 9.8, 9.21, 9.23 + Cubic Graphs (International MYP 5 Section 4:06)
- find the midpoint of the line segment AB, given the coordinates of points A and B (8.4.2)
- recognise that equations of the form y = mx + c correspond to straight-line graphs (8.3.2)
- Determining the coordinates of points identified by geometrical information (A.3.3)
- Determining the coordinates of the midpoint of a line segment, given the coordinates of the two end points (A.3.3)
- Recognising that equations of the form $x = a$ and $y = b$ correspond to straight line graphs parallel to the y-axis and to the x-axis respectively

(A.3.3)
- Completing tables of values and drawing graphs with equations of the form $y = mx + c$ where the values of m and c are given and may be an integer or a fraction (A.3.3)
- Drawing straight line graphs with equations in which y is given implicitly in terms of x, for example $x + y = 7$ (A.3.3)
- Calculating the gradient of a straight line given its equation of the coordinates of two points on the line (A.3.3)
- Recognising that graphs with equations of the form $y = mx + c$ are straight line graphs with gradient m and intercept (0, c) on the y-axis (A.3.3)
- Finding the equation of a straight line given the coordinates of two points on the line (A.3.3)
- Finding the equation of a straight line parallel to a given line (A.3.3)
- Using regions to represent simple linear inequalities in one variable* (A.2.8)
- Using regions to represent the solution set to several linear inequalities in one or two variables* (A.2.8)
- Completing tables of values and drawing graphs of quadratic functions (A.3.3)
- Plotting and drawing graphs with equation $y = Ax^3 + Bx^2 + Cx + D$ in which (i) the constants are integers and some could be zero (ii) the letters x and y can be replaced with any other two letters (A.3.3)
* Supplement with (Edexcel Book 1 – Graphs Unit 2)

Branch 3 – Geometry and Trigonometry

Measurement, Congruence and Similarity – 9.7, 9.20
Need to Supplement Ratio in Area and Volume (International MYP 5 Section 11:05 and 11:06)
- solve problems involving measurements in a variety of contexts; convert between area measures (e.g. mm^2 to cm^2, cm^2 to m^2, and vice versa) and between volume measures (e.g. mm^3 to cm^3, cm^3 to m^3, and vice versa) (9.4.4)*
- calculate the surface area and volume of right prisms (9.4.4)
* choose and use units of measurement to measure, estimate, calculate and solve problems in a range of contexts; know rough metric equivalents of imperial measures in common use, such as miles, pounds (lb) and pints(8.4.4) *Supplement
- Converting between units of length and of area within the metric system, for example m^2 and cm^2 (A.4.9)
- Finding the volumes of right prisms, including cuboids and cylinders, using appropriate formulae (A.4.9)
- Finding the surface areas of solids with rectangular and triangular faces (A.4.9)
- Converting between units of volume within the metric system, for example cm^3 and litres, m^3 and cm^3 (A.4.9)
- Finding the surface area and/or volume of a sphere and of a right circular cone using relevant formulae (A.4.9)
- Understanding that, if two shapes are similar their corresponding angles are equal and all their corresponding lengths are in the same ratio (A.4.10)
- Using similarity to find lengths of sides (A.4.10)
- Understanding that areas of similar figures are in the ratio of the square of corresponding sides (A.4.10)
- Understanding that the volumes of similar figures are in the ratio of the cube of corresponding sides (A.4.10)
- Using areas and volumes of similar figures in solving problems (A.4.10)

Transformation Geometry – International MYP 5 Chapter 13
- Understanding that rotations are specified by a centre and an angle (A.5.2)
- Rotating a shape about a point, measuring the angle of rotation in right angles, degrees or simple fractions of a turn (A.5.2)
- Understanding that an anti-clockwise rotation is a positive angle rotation and a clockwise rotation is a negative angle rotation (A.5.2)
- Understanding that reflections are specified by a mirror line, for example x = 1, y = x on a coordinate grid* (A.5.2)
- Reflecting shapes in a mirror line (A.5.2)
- Constructing a mirror line, given a shape and its reflection (A.5.2)

Trigonometry – 9.13, 9.25
- use straight edge and compasses to construct triangles, given right angle, hypotenuse and side (RHS) (9.4.3)
- Identifying the various sides of a right-angled triangle as the hypotenuse, opposite and adjacent (A.4.8)
- Understanding and using sine, cosine and tangent of acute angles to find lengths and angles in a right-angled triangle (A.4.8)
- Using trigonometry to solve problems, including bearings (A.4.8)
- Using Pythagoras' theorem and trigonometry to solve problems (A.4.8)

Optional Extension - Vectors – 9.26
- Understanding that a vector has both magnitude and direction (A.5.1)
- Understanding and using vector notation (A.5.1)
- Multiplying vectors by scalar quantities (A.5.1)
- Adding and subtracting vectors (A.5.1)
- Calculating the modulus (magnitude) of a vector (A.5.1)
- Finding the resultant of two or more vectors (A.5.1)
- Applying vector methods for simple geometrical proofs in 2-D (A.5.1)

Branch 4 – Statistics and Probability

Sets and Venn Diagrams – 9.3
- Meaning of 'set' (A.1.5)
- Defining sets of numbers by describing, for example {first four odd numbers}, {x: x is a factor of 12 or by listing, eg {1, 3, 5, 7} (A.1.5)
- Understanding the meaning of the universal set ξ (A.1.5)
- Understanding the meaning of the null or empty set Ø or { } (A.1.5)
- Membership of a set including the notation $\in$ and $\notin$ (A.1.5)
- Intersection and union of sets including the notation $\cap$ and $\cup$ (A.1.5)

- Understanding sets defined in algebraic terms (A.1.5)
- Understanding and using subsets, including ⊂ notation (A.1.5)
- Understanding and using the complement of a set (A') (A.1.5)
- Using Venn diagrams to represent sets and the number of elements in sets (A.1.5)
- Using the notation $n(A)$ for the number of elements in the set A (A.1.5)
- Using sets in practical situations (A.1.5)

Statistics 9.10, 9.17

- suggest a problem to explore using statistical methods, frame questions and raise conjectures (9.5.1)
- discuss how different sets of data relate to the problem; identify possible primary or secondary sources; determine the sample size and most appropriate degree of accuracy (9.5.1)
- design a survey or experiment to capture the necessary data from one or more sources; design, trial and if necessary refine data collection sheets; construct tables for gathering large discrete and continuous sets of raw data, choosing suitable class intervals; design and use two-way tables (9.5.1)
- gather data from specified secondary sources, including printed tables and lists, and ICT-based sources, including the internet (9.5.1)
- calculate statistics and select those most appropriate to the problem or which address the questions posed (9.5.2)
- select, construct and modify, on paper and using ICT, suitable graphical representations to progress an enquiry and identify key features present in the data. Include: line graphs for time series, scatter graphs to develop further understanding of correlation (9.5.2)
- interpret graphs and diagrams and make inferences to support or cast doubt on initial conjectures; have a basic understanding of correlation (9.5.3)
- compare two or more distributions and make inferences, using the shape of the distributions and appropriate statistics (9.5.3)
- review interpretations and results of a statistical enquiry on the basis of discussions; communicate these interpretations and results using selected tables, graphs and diagrams (9.5.3)
- Calculating an estimate for the mean for grouped data, using halfway values (A.6.2)
- Constructing cumulative frequency diagrams from tabulated data (A.6.1)
- Using cumulative frequency diagrams (A.6.1)
- Constructing and interpreting histograms for unequal class intervals* (A.6.1)
- Understanding the concept of average as a value which is representative of a set of data (A.6.2)
- Finding the mean, median, mode and range for a discrete data set from a frequency table (A.6.2)
- Selecting the most appropriate average (A.6.2)
- Finding the modal class for grouped data (A.6.2)
- Calculating an estimate for the mean for grouped data, using halfway values (A.6.2)
- Estimating the median from a cumulative frequency diagram (A.6.2)
- Graphical representation of numerical data (B.10)
- Determination of the mean, median and mode for a discrete data set (B.10)
- Calculation of an estimate of the mean of a larger number of quantities given in grouped frequencies* (B.10)
- Determination of a modal class and the median for grouped data (B.10)

* Supplement with (Edexcel Math B – Statistics Unit 5)

Probability – 9.14

- interpret results involving uncertainty and prediction (9.5.4)
- identify all the mutually exclusive outcomes of an experiment; know that the sum of probabilities of all mutually exclusive outcomes is 1 and use this when solving problems (9.5.4)
- compare experimental and theoretical probabilities in a range of contexts; appreciate the difference between mathematical explanation and experimental evidence (9.5.4)
- Understanding sample spaces and using them to find the probability that an event will occur (A.6.3)
- Listing all the outcomes for single events systematically, or for two successive events, and using lists to find the probability that an event will occur (A.6.3)
- Using the sum of probabilities of all possible outcomes equalling one (A.6.3)
- Understanding the meanings of 'equally likely' and 'mutually exclusive' (A.6.3)
- Using the addition rule for probability for mutually exclusive events (A.6.3)
- Understanding and using expected frequency to calculate an estimate for the number of times an event will occur (A.6.3)
- Determining the probability that two or more independent events will both occur (A.6.3)
- Knowing when to add or multiply probabilities (A.6.3)
- Using simple conditional probability when combining events (A.6.3)
- Drawing tree diagrams to show the outcomes of two or more successive events and related probabilities (A.6.3)
- Using tree diagrams to solve probability problems (A.6.3)

KIST Language and Literature English Vertical and Horizontal Plan

	Unit One	Unit Two	Unit Three	Unit Four	Unit Five	Unit Six
Grade 6	**The Shape of Our Destiny** **Global Context:** Orientation in Space and Time **Key Concept**: Communication **Text**: 'Holes' by Louis Sachar	**The Hero's Journey** **Global Context:** Personal and Cultural Expression **Key Concept:** Creativity **Text:** Selected myths, legends and folktales of various national origins	**Poetry** **Global Context:** Personal and cultural expression **Key Concept:** Creativity **Text:** A selection of poems	**Friendship and Loss** **Global Context:** Identities and Relationships **Key Concept:** Connections **Text:** 'Bridge to Terabithia' by Katherine Patterson	**Stories of Freedom and Survival** **Global Context:** Identities and Relationships **Key Concept:** Creativity **Text:** 'I Am David' by Ann Holm	**Speak Up! – The Importance of Rhetoric** **Global Context:** Globalization and Sustainability **Key Concept:** Communication **Texts:** A selection of speeches
Grade 7	**New Traditions** **Global Context:** Orientation in time and space **Key Concept:** Perspective **Text:** 'The Whale Rider' by Witi Ihimaera	**Timeline of Poetry** **Global Context:** Personal and cultural expression **Key Concept:** Creativity **Text:** A selection of poems	**Good Things Come in Small Packages** **Global Context:** Personal and Cultural expression **Key Concept:** Creativity **Text:** selection of short stories	**A Perfect Society** **Global Context:** Identities and Relationships **Key Concept:** Connections **Text:** 'The Giver' by Lois Lowry	**Film as Text** **Global Context:** Personal and Cultural expression **Key Concept:** Communication **Text:** 'Lion' by Garth Davis	**Marketing the Magic! Theme Park Project** **Global Context:** Personal and Cultural expression **Key Concept:** Communication
Grade 8	**Welcome Fires – Writing for Community and Empathy** **Global Context:** Identities and Relationships **Key Concept**: Personal and Cultural Expression **Text:** 'Orchards' by Holly Thompson	**The W(hole) Truth - Language and the News** **Global Context:** Orientation in time and space **Key Concept:** Communication **Text**: Online local and global news resources	**True Stories – Writing to Engage and Inform** **Global Context:** Orientation in time and space **Key Concept:** Connections **Text:** 'Night' by Elie Wiesel	**Tales from Tokyo's Past** **Global Context:** Orientation in time and space **Key Concept:** Connections **Text:** selection of 20th cent. Japanese short stories in translation	**Stay Gold, Ponyboy** **Global Context:** Identities and relationships **Key Concept:** Change **Text:** 'The Outsiders' by S.E. Hinton	**Walls! Film Festival** **Global Context:** Personal and cultural expression **Key Concept:** Perspective **Text:** 'October Sky' directed by Joe Johnston
Grade 9	**The Shape of Things We Say** **Global Context:** Personal and cultural expression **Key Concept:** Communication **Texts:** Selection of poetry by Wilfred Owen, Siegfried Sassoon, Margaret Atwood and William Shakespeare	**Language and Propaganda** **Global Context:** Orientation in time and space **Key Concept:** Communication **Text:** a selection of non-literary	**My Writing Spirit** **Global Context:** Identities and relationships **Key Concept:** Creativity **Text:** 'To Kill a Mockingbird' by Harper Lee	**Violent Delights, Violent Ends** **Global Context:** Personal and cultural expression **Key Concept:** Perspectives **Text:** 'Romeo and Juliet' by William Shakespeare	**We are Lonesome Animals** **Global Context:** Fairness and Development **Key Concept:** Connections **Text:** 'Of Mice and Men' by John Steinbeck	**Writing for Change! - Language and Editorials** **Global Context:** Orientation in time and space **Key Concept:** Communication **Text**: a selection of articles and editorials
Grade 10	**The Centre Cannot Hold** **Global Context:** Identities and relationships **Key Concept:** Perspective **Text:** 'Things Fall Apart' by Chinua Achebe	**Persepolis** **Global Context:** Orientation in space and time **Key Concept:** Perspective **Text:** Persepolis	**Poetry** **Global Context:** Personal and cultural expression **Key Concept:** Communication **Texts:** A selection of poems	**Macbeth** **Global Context:** Fairness and development **Key Concept:** Creativity **Text:** 'Macbeth' by William Shakespeare	**Language and campaigns** **Global Context: Personal and cultural expression** **Key Concept: Communication** **Text:** a selection of campaigns	**Kitchen** **Global Context:** Orientation in space and time **Key Concept:** Communication **Text:** 'Kitchen' by Banana Yoshimoto

KIST Language and Literature English Objectives (Grade 7)

	In order to:	**Students need to understand that:**
Objective A: Analysing		
i	**Identify** and **explain** the content, context, language, structure, technique and style of text(s) and **explain** the relationships among texts	Textual analysis involves identifying and explaining the content, context, language, structure, technique and style, and explaining the relationships among texts
ii	**Identify** and **explain** the effects of the creator's choices on an audience	Creators can make choices to produce an effect on an audience
iii	**Justify** opinions and ideas, using examples, explanations and terminology	Opinions and ideas need to be supported with examples and explained using appropriate terminology
iv	**Interpret** similarities and differences in features within and between genres and texts	Conclusions can be made regarding the similarities and differences in features within and between genres and texts
Objective B: Organising		
i	**Employ** organizational structures that serve the context and intention	The organizational structure of texts varies according to the genre, purpose and audience
ii	**Organize** opinions and ideas in a logical manner	When ideas and opinions are ordered in a logical and coherent manner, communication is clear and effective
iii	**Use** referencing and formatting tools to create a presentation style suitable to the context and intention	Ideas and information gathered from sources need to be referenced and formatted correctly according to the purpose and context
Objective C: Producing Texts		
i	**Produce texts** that demonstrate thought, imagination and sensitivity while **exploring and considering** new perspectives and ideas arising from personal engagement with the creative process	Creators of texts can explore and consider ideas in new ways through personal engagement with the creative process
ii	**Make stylistic choices** in terms of linguistic, literary and visual devices, **demonstrating awareness** of impact on an audience	The linguistic, literary and visual choices that creators make impact on an audience
iii	**Select** relevant details and examples to develop ideas	Ideas are developed through the use of relevant details and examples
Objective D: Using language		
i	**Use** appropriate and varied vocabulary, sentence structures and forms of expression	Effective communication relies on appropriate and varied use of vocabulary, sentence structure and forms of expression
ii	**Write** and **speak** in an appropriate register and style	The register and style of writing and speaking needs to suit the audience and purpose
iii	**Use** correct grammar, syntax and punctuation	Correct grammar, syntax and punctuation are necessary for clear communication
iv	**Spell** (alphabetic languages), **write** (character languages) and **pronounce** with accuracy	Correct spelling, character formation and pronunciation are necessary for clear communication
v	**Use** appropriate non-verbal communication techniques	The use of appropriate non-verbal techniques can enhance oral communication

KIST Sciences Vertical and Horizontal Plan 6-10 MYP Structure

	G6	**G7**	**G8**	**G9**	**G10**
1	Introduction to science-methodologies and key concepts	Fit and Healthy	Nature of living organisms and Structure and function in organisms (1).	Periodic Table and Stoichiometry (ch 5 &6)	Acids and Bases
2	Classification Ecosystems	Cells and Genetics and natural selection	Ecology and the environment	Extraction of Metals and Electrolysis (Redox)	Organics
3	Simple chemical reactions	Matter atomic models/periodic table/separating techniques	Inorganic chemistry (1) and Principles of chemistry (1)	Nutrition and Cellular Energetics enzymes	Reproduction and Pregnancy
4	Forces and Simple Machines	Reactivity of Metals and Reactivity Series	Physical chemistry	Organ Systems Osmosis and diffusion cells	Genetics and Evolution
5	Reproduction Plants and animals	Waves Light and sound	Solids, liquids and gases	Heating effects of electric currents	Newtonian Mechanics
6	Planet Earth and Energy Resources	Space and Gravity and motion	Energy resources and energy transfers	Electromagnetic induction	Atomic, nuclear and Particle Physics
	General Science Teacher			Specialist Teacher for DP	

Sciences objectives and concepts unit plan (Grade 7)

Textbook: Exploring Science 7, 8 and 9 (3 textbooks)

Topic 1- Topic 1- Fit and Healthy

Students will be taught:

Knowledge	Practical Skills & Processes:
Students will be able to define, explain or apply the following: • **Nutrients in food** • **Use of nutrients in body** • **The food pyramid** • **Food tests** • **The digestive system form and function** • **Digestion, absorption, assimilation, egestion of wastes** • **Enzymes** • **Respiration** • **The respiratory and circulatory systems** • **The changes in air due to breathing** • **Fitness, heart rate, lung capacity** • **Asthma** • **Smoking, Alcohol & Drugs** • **Dietary deficiency**	Students will be able to do the following: • **Perform food tests for sugars, starch, lipids, protein.** • **Investigate the activity of digestive enzymes experimentally** • **Dissect a heart** • **Perform experiments to show the O_2 and CO_2 concentration of inhaled and exhaled air.** • **Investigate respiration in other organisms** • **Perform tests to measure various aspects of fitness (heart rate, lung capacity, recovery rate, grip strength**

Topic 2- Cells and genetics

Students will be taught:

Knowledge	Practical Skills & Processes:
• **Cell theory** • **Plant and animal cell structure** • **Cell division resulting in haploid or diploid cells** • **DNA's structure and function** • **Chromosomes form and function** • **Genes** • **Inheritance** • **Genetic diseases**	• Create a microscope slide and focus the microscope

Topic 3- Matter

Students will be taught:

Knowledge	Practical Skills & Processes:
Students will be able to define, explain or apply the following: • **Lab safety** • **Equipment** • **Atoms and elements** • **Periodic table** • **Compounds and mixtures** • **Reactions and equations for forming compounds** • **Metals and metal compounds** • **Reactions of metals and Metal compounds** • **Differentiate reactants from products in a chemical equation** • **Explain how acids react with metals** • **Predict how acids react with carbonates**	Students will be able to do the following: • Work safely in the laboratory • Select and use appropriate equipment for lab experiments and activities with limited guidance • Make and test predictions by designing "fair test" experiments • Conduct lab work with limited guidance. • Record and process data from experiments. • Form conclusions for experiments and Identify limitations • Conduct experiments to show how elements react to form compounds with new properties • Use Bunsen burner, metals, acids, glassware safely • Test for presence of hydrogen and carbon dioxide in reactions • Create salts • Present research and lab findings clearly and concisely

Topic 4- Reactivity of Metals and Reactivity Series

Students will be taught:

Knowledge	Practical Skills & Processes:
• that metals are good conductors of heat and electricity • that most non-metallic elements are poor conductors of heat and electricity • about the range of metals, their uses and where they are found • to organise facts/ideas/ information into an appropriate sequence • to represent the reactions of metals with dilute acids by word equations • to identify patterns in reactions between metals and dilute acids • to represent reactions of acids with metal oxides by word equations • that when an alkali is added to an acid, neutralisation takes place • the hazards associated with alkalis • that there are many different salts • that many salts are useful compounds • to identify patterns in the chemical reactions • that many metals are affected by air and water and that different metals are affected in different ways • how an activity series can help to make sense of the reactions of metals • how an activity series can be used to make predictions	• react with metals, metal carbonates and metal oxides • to use and combine data from a variety of information sources • that some metals react with dilute acids to form salts and release hydrogen • to carry out a test for hydrogen • that production of new materials and energy changes are evidence of chemical reactions to use patterns in reactions to make predictions about other reactions • that acids react with metal carbonates, producing carbon dioxide and a salt • how to obtain a neutral solution from an acid and an alkali • that acids react with metal oxides, producing a salt and water • that production of the salt is evidence of a chemical reaction • to use common laboratory equipment safely and effectively • that some metals are soft and can be cut • that some metals react with cold water to produce hydrogen

• to identify what information is needed, and use different texts as sources • to structure paragraphs to develop points, using evidence and additional facts • to relate the occurrence, extraction and use of metals to their position in the activity series • that a metal will displace a less reactive metal from a solution of one of its salts • to use a proposed reactivity series to make predictions	• that some metals react more readily with water than others • about the hazards associated with some metals • that some metals react more readily with acids than others • that metals react with oxygen to form oxides • to decide which observations are relevant to a piece of work • to evaluate the methods used in terms of the quality of the salt made • to construct a table to show patterns clearly • to identify patterns in observations • to decide which observations or measurements are appropriate • to identify variables that need to be controlled and decide how to do this • to choose axes and scales for graphs • to decide whether results that do not fit the pattern expected arise from experimental shortcomings or are significant

Topic 5- Light and Sound

Students will be taught:

Knowledge	Practical Skills & Processes:
Students will apply scientific knowledge to the following: • Be able to describe and differentiate between Transverse and Longitudinal waves • Be able to identify the frequency and period with relation to waves • Know the definitions and be able to label wavelength and amplitude on a wave diagram • Identify sound waves as longitudinal waves • Be able to explain light reflection in mirrors • Be able to explain light refraction in Perspex blocks • Be able to explain concave and convex lenses • Be able to explain how we hear things • Explain how different animals have different audible ranges	• Use slinkies to model wave and particle movement • Use ray boxes to make ray diagrams • Make ray diagrams for mirrors, Perspex blocks and lenses • Look at model ear • Use sound generator to test hearing range

Topic 6- Space and Gravity

Students will be taught:

Knowledge	Practical Skills & Processes:
• Recall where the Earth gets its heat and light from. • State the lengths of days, months and years. • Define a satellite • Explain the Moon's place in the Solar System. • Describe the phases of the Moon.	• **Build a scale model of the solar system** • **Graph relationships between planetary data** • **Model the relationship between the Sun, Moon, and Earth.**

- Explain why eclipses happen.

- Explain why we have seasons.
- Discuss how day length changes with the seasons.
- Explain how the height of the Sun changes with the seasons.
- Explain why the Sun feels warmer in summer.
- Recall what planets are and how we see them. Define what asteroids are.
- Explain why planets look brighter than stars.
- Define what stars are.
- Explain why we can only see the stars at night.
- Explain why the stars appear to move across the sky.
- Explain about the relative sizes objects in the Universe.

- State that gravity is an attractive force which acts on the Earth towards the centre of the planet
- State that gravity is an attractive force between objects with mass
- Justify how the idea of gravity was related to empirical observations

- State that where the gravitational force is lower than on the Earth, the mass of an object remains the same, but its weight is less

- Use quantitative relationships

- Recall that gravitational attraction between bodies decreases as the distance between them increases
- Describe some examples of space exploration
- Recall that the weight of an object can vary whilst the mass remains the same

- Outline how ideas about the solar system have changed over time
- Evaluate conflicting evidence to arrive at a view
- Use more formal language appropriate to objectivity and impartiality

- State that the Sun is massive and exerts a very large gravitational force, which keeps planets in orbit
- Sketch the model of circular motion to data on the orbits of planets and satellites

- State that the Moon is a natural satellite of the Earth, whose orbit is maintained by the Earth's gravitational pull•

- Explain about some uses of artificial satellites
- Explain about information that can be gained through the use of satellites
- Discuss the understanding of planetary and satellite motion

K. International School Tokyo – Individuals and Societies Scope and Sequence Grades 6-10

	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10
Unit 1	**Subject**: Geography **Topic**: Global Citizen **Key Concept**: Global interactions **Related Concepts**: Power, choice **Global Context**: Global. & sustainability	**Subject**: Geography **Topic**: Globalization **Key Concept**: Change **Related Concepts**: Globalization; processes **Global Context**: Global. & sustainability	**Subject**: Global Politics **Topic**: How are societies governed? **Key Concept**: Systems **Related Concepts**: Power **Global Context**: Fairness and development	**Subject**: History **Topic**: Age of Imperialism **Key Concept**: Change **Related Concepts**: Causality, resources, power **Global Context**: Identities and rel.	**Subject**: Geography **Topic**: Development **Key Concept**: Global Interactions **Related Concepts**: Patterns and trends, processes, disparity and equity **Global Context**: Fairness and development
Unit 2	**Subject**: Geography **Topic**: What is Geography? **Key Concept**: Time, Place, and Space **Related Concepts**: Scale and patterns **Global Context**: Orient in space & time	**Subject**: Geography **Topic**: Environmental Conservation **Key Concept**: Systems **Related Concepts**: Causality, mgt and intervention, sustainability **Global Context**: Global. & sustainability	**Subject**: ITGS **Topic**: Technology **Key Concept**: Global Interactions **Related Concepts**: Perspective, Innovation, Revolution **Global Context**: Identities and rel.	**Subject**: History **Topic**: Identity and Resistance **Key Concept**: Change **Related Concepts**: Causality, Rights, Identity **Global Context**: Personal & cultural exp.	**Subject**: History **Topic**: Trade and Exchange **Key Concept**: Global interactions **Related Concepts**: Cooperation **Global Context**: Global. & sustainability
Unit 3	**Subject**: History **Topic**: What is History? (What can we learn from different civilizations) **Key Concept**: Time, Place, and Space **Related Concepts**: Sig, Inn, Rev. **Global Context**: Scientific.& tech. inn.	**Subject**: History **Topic**: Middle Ages **Key Concept**: Time, Place, and Space **Related Concepts**: Perspective, Identity **Global Context**: Fairness & development	**Subject**: Geography **Topic**: Urban Environments **Key Concept**: Systems **Related Concepts**: Patterns and trends **Global Context**: Fairness & development	**Subject**: History **Topic**: Technology and Power during the Cold War **Key Concept**: Change **Related Concepts**: Conflict, Ideology **Global Context**: Scientific and tech. inn.	**Subject**: History **Topic**: Civil Rights **Key Concept**: Change **Related Concepts**: Community, rights, integration **Global Context**: Fairness and development
Unit 4	**Subject**: Geography **Topic**: Settlements **Key Concept**: Change **Related Concepts**: Processes, Sustainability **Global Context**: Identities and Relationships	**Subject**: History **Topic**: Age of Exploration **Key Concept**: Global Interactions **Related Concepts**: Causality **Global Context**: Orient in space & time	**Subject**: Sociology **Topic**: What is Culture? **Key Concept**: Time, Place, and Space **Related Concepts**: Culture, Identity **Global Context**: Personal and cultural expression **IDU with Art and Music**	**Subject**: Economics **Topic**: Fundamentals of Microeconomics **Key Concept**: Systems **Related Concepts**: Resources, scarcity **Global Context**: Fairness and development	**Subject**: Psychology **Topic**: Situational Variables **Key Concept**: Time, Place, and Space **Related Concepts**: Cognition, group, mind **Global Context**: Identities and relationships **IDU with Lang & Lit**
Unit 5	**Subject**: History **Topic**: Diseases that changed History **Key Concept**: Change **Related Concepts**: Causality, significance **Global Context**: Scientific & Tech. Inn	**Subject**: Geography **Topic**: Sustainable Energy **Key Concept**: Time, place, space **Related Concepts**: Resources **Global Context**: Scientific and technological innovation	**Subject**: History **Topic**: Why do societies experience revolution? **Key Concept**: Change **Related Concepts**: Causality, significance **Global Context**: Orient in space & time	**Subject**: Geography **Topic**: Global resource consumption & security **Key Concept**: Global Interactions **Related Concepts**: Sustainability, Causality **Global Context**: Global. & sust.	**Subject**: Economics **Topic**: Production Possibilities Curve **Key Concept**: Systems **Related Concepts**: Model, scarcity, growth **Global Context**: Global. & sustainability
Unit 6	**Subject**: Geography **Topic**: Plate tectonics, earthquakes, and volcanoes **Key Concept**: Systems **Related Concepts**: Causality., networks, processes **Global Context**: Orientation in space & time **IDU with Science**	**Subject**: History **Topic**: Ideas and Innovations **Key Concept**: Change **Related Concepts**: Causality, innovation, revolution **Global Context**: Personal and Cultural expression	**Subject**: Business Management **Topic**: What is Business? **Key Concept**: Change **Related Concepts**: Perspective, strategy, structure **Global Context**: Identities and rel.	**Subject**: Geography **Topic**: Population Change **Key Concept**: Time, Place and Space **Related Concepts**: Patterns and Trends **Global Context**: Orient in space & time	**Subject**: History **Topic**: MYP Capstone **Key Concept**: Global interactions **Related Concepts**: Significance **Global Context**: Fairness and development

Prescribed Learning Outcomes (Grade 7)

The prescribed learning outcomes define what students are expected to know and be able to do by the end of each grade of study.

<u>Unit 1 – Globalization</u>

- *Explain* the concept of globalization.
- *Describe* the causes of globalization.
- *Describe* the features of transnational corporations.
- *Explain* how globalization has affected sport.
- *Explain* how globalization has affected the gaming industry.
- *Explain* how globalization has affected language.

<u>Unit 2 – Conservation</u>

- *Find out* about different environments in the world and how they can be seen as a system.
- *Explore* examples of the human impact on environments with case studies of grassland and rainforest biomes.
- *Explore* the make up and role of biomes.
- *Take action* by promoting sustainable development both in local and global contexts.

<u>Unit 3 – Middle Ages</u>

- *Explain* the impact of the decline of the Roman Empire.
- *Describe* how society was structured during the Middle Ages.
- *Describe* what life was like in Britain during the Middle Ages
- *Explain* how empires expanded their influence during the Middle Ages.
- *Describe* what life was like in China during the Middle Ages.

<u>Unit 4 – Age of Exploration</u>

- *Describe* how exploration affected early societies.
- *Evaluate* the causes and consequences of the "Age of Exploration."
- *Describe* how industrialization affected exploration.
- *Identify* examples of female explorers.
- *Identify* examples are there of exploration in the 21st century.
- *Discuss* why people explore.
- *Evaluate* the causes and consequences of exploration.
- *Discuss* whether exploration lead to exploitation.

<u>Unit 5 – Sustainable Energy</u>

- *Identify* different types of natural resources.
- *Describe* the differences between human and economic resources.
- *Explain* the differences between renewable, non-renewable and sustainable resources.
- *Evaluate* the arguments for and against different sources of energy production.

<u>Unit 6 – Ideas and Innovations</u>

- *Describe* the key ideas of the Renaissance: Humanism, Classicism, Perspective
- *Identify* the significant individuals of the Renaissance: da Vinci, Michelangelo
- *Describe* some ideas and innovations that originated from the Renaissance: Printing Press, Astronomy Advances
- *Describe* some of the important changes that occurred during the Enlightenment: Scientific Ideas and Innovation of the Enlightenment, Development of Vaccinations, Politics and the Enlightenment.

KIST Language Acquisition Japanese Curriculum Content

	Unit One	Unit Two	Unit Three	Unit Four
Grade 6 Japanese	Unit 1: Myself & the Others **Global Context:** Identities & Relationships **Key Concept:** Connection **Related Concepts:** Audience, Convention, Empathy	Unit 2: Family **Global Context:** Identities & Relationships **Key Concept:** Connection **Related Concepts:** Audience, Convention, Empathy	Unit 3: School **Global Context:** Fairness & Development **Key Concept:** Connection **Related Concepts:** Structure, Message, Purpose	Unit 4: Sports and Leisure **Global Context:** Identities & Relationships **Key Concept:** Culture **Related Concepts:** Audience, Patterns, Theme
Grade 7 Intensive English	Unit 1: My Town **Global Context:** Globalization & Sustainability **Key Concept:** Connection **Related Concepts:** Context, Point of view, Purpose	Unit 2: Daily Routine **Global Context:** Orientation in time & space **Key Concept:** Communication **Related Concepts:** Message, Idiom, Purpose	Unit 3: Weather & Seasons **Global Context:** Globalization & Sustainability **Key Concept:** Change **Related Concepts:** Word choice, Context, Idiom	Unit 4: Health **Global Context:** Identities & Relationships **Key Concept:** Identity **Related Concepts:** Purpose, Function, Empathy
Grade 8 Intensive English	Unit 1: Food **Global Context:** Globalization & Sustainability **Key Concept:** Culture **Related Concepts:** Accent, Conventions, Themes	Unit 2: Holidays **Global Context:** Identities & Relationships **Key Concept:** Culture **Related Concepts:** Form, Purpose, Stylistic choices	Unit 3: Entertainment **Global Context:** Personal & Cultural Expression **Key Concept:** Creativity **Related Concepts:** Meaning, Message, Theme	Unit 4: Personal Relationships **Global Context:** Fairness & Development **Key Concept:** Communication **Related Concepts:** Message, Word choice, Voice
Grade 9 Language Acquisition	Unit 1: Career **Global Context:** Identities & Relationships **Key Concept:** Connection **Related Concepts:** Concept, Function, Purpose	Unit 2: Traveling **Global Context:** Orientation in time & space **Key Concept:** Creativity **Related Concepts:** Audience, Structure, Purpose	Unit 3: Short Stories **Global Context:** Personal & Cultural Expression **Key Concept:** Creativity **Related Concepts:** Context, Theme, Form	Unit 4: Japanese Modern Culture **Global Context:** Personal & Cultural Expression **Key Concept:** Culture **Related Concepts:** Function, Audience, Stylistic choice
Grade 10 Language Acquisition	Unit 1: Environment **Global Context:** Globalization & Sustainability **Key Concept:** Connection **Related Concepts:** Message, Point of view, Argument	Unit 2: Media & Technology **Global Context:** Scientific & Technical Innovation **Key Concept:** Communication **Related Concepts:** Meaning, Audience, Bias	Unit 3: Social Issues **Global Context:** Fairness & Development **Key Concept:** Connection **Related Concepts:** Form, Point of view, Argument	Unit 4: Festival **Global Context:** Personal & Cultural Expression **Key Concept:** Culture **Related Concepts:** Patterns, Conventions, Purpose
Grade 11 Language Acquisition (HL Only)	Unit 1:Communication and the media	Unit 2: Global issues	Unit 3: Literature Text: '"Bocchan" by Soseki Natsume	Unit 4: Literature Text: "Tasebune" by Ogai Mori.
Grade 12 Language Acquisition (HL Only)	Unit 1: Social relationships	Unit 2: Science & Technology	Unit 3: Customs and Traditions	Unit 4: Leisure

Prescribed Learning Outcomes (Grade 7)

The prescribed learning outcomes define what students are expected to know and be able to do by the end of each grade of study.

Unit 1 - My Town

- Students will investigate their own town, and research how Japanese use in the society.
- Students will research their favorite town's history, population and interesting spots.
- Students will learn how to describe their favorite town's characteristic to the class.
- Students will write a pamphlet to introduce about their favorite town.

Text Type: Pamphlet

Unit 2 - Health

- Students will be able to express their physical condition and emotions..
- Students will discuss how they can keep good health.
- Students will learn how to persuade their friend's unhealthy customs.
- Students will make a play for persuading other people.
- Students will learn how to talk about their physical condition at a clinic.

Text Type: set of instruction, presentation

Unit 3 - Daily Routine

- Students will be able to express their physical condition and emotions..
- Students will discuss how they can keep good health.
- Students will learn how to persuade their friend's unhealthy customs.
- Students will make a play for persuading other people.
- Students will learn how to talk about their physical condition at a clinic.

Text Type: diary, report

Unit 4 - Weather and Seasons

- Students will learn how to make weather reports.
- Students will discuss the characteristics of the four seasons in Japan.
- Students will demonstrate forecasting using a Japanese map.
- Students will examine how the weather affects our daily life and our health.
- Students will investigate the typical features of the climate during each season in Japan.
- Students will report the weather like a TV reporter.
- Students will be able to read the weather report on newspapers.

Text Type: Official report, news report, presentation

KIST Language and Literature Japanese Vertical and Horizontal Plan

	Unit One	Unit Two	Unit Three	Unit Four
Grade 6	**Ikenbun** **Global Context:** Personal & Cultural Expression **Key Concept:** Communication **Related Concepts:** Purpose, Point of view, Self-expression, Audience imperative	**Yamanashi (Miyasawa Kenji)** **Global Context:** Globalization & Sustainability **Key Concept:** Perspective **Related Concepts:** Intertextuality, Point of view, Style	**Shinbun - Koukoku** **Global Context:** Fairness & Development **Key Concept:** Communication **Related Concepts:** Structure, Point of view, Purpose	**Haiku** **Global Context:** Personal & Cultural Expression **Key Concept:** Creativity **Related Concepts:** Style, Self-expression, Theme
Grade 7	**Senden** **Global Context:** Personal & Cultural Expression **Key Concept:** Communication **Related Concepts:** Purpose, Style	**Taketori Monogatari** **Global Context:** Orientation in time & space **Key Concept:** Connection **Related Concepts:** Character, Point of view, Setting	**Edo kara no message** **Global Context:** Personal & Cultural Expression **Key Concept:** Connection **Related Concepts:** Theme, Point of view, Setting	**Shi** **Global Context:** Identities & Relationships **Key Concept:** Creativity **Related Concepts:** Theme, Style, Self-expression
Grade 8	**Hyouronbun** **Global Context:** Personal & Cultural Expression **Key Concept:** Perspective **Related Concepts:** Genre, Point of view, Context	**Tanka** **Global Context:** Personal & Cultural Expression **Key Concept:** Creativity **Related Concepts:** Style, Theme, Intertextuality	**Media ron** **Global Context:** Personal & Cultural Expression **Key Concept:** Communication **Related Concepts:** Purpose, Style, Audience imperative	**Dazai Osamu** **Global Context:** Identities & Relationships **Key Concept:** Perspective **Related Concepts:** Point of view, Intertextuality, Context
Grade 9	**Media ron** **Global Context:** Personal & Cultural Expression **Key Concept:** Communication **Related Concepts:** Purpose, Theme, Audience imperative	**(Takasebune) Mori Ougai** **Global Context:** Personal & Cultural Expression **Key Concept:** Perspective	**Koten – Tanka - Zuihitsu** **Global Context:** Identities & Relationships **Key Concept:** Connection **Related Concepts:** Intertextuality, Genre, Setting	**Shi no bunseki** **Global Context:** Personal & Cultural Expression **Key Concept:** Perspective **Related Concepts:** Audience imperative, Context, Purpose
Grade 10	**Gengo to bunka (shouronbun)** **Global Context:** Personal & Cultural Expression **Key Concept:** Communication **Related Concepts:** Setting, Structure, Purpose	**Hyouronbun** **Global Context:** Orientation in time & space **Key Concept:** Perspective **Related Concepts:** Style, Point of view, Purpose	**Zuihitsu** **Global Context:** Personal & Cultural Expression **Key Concept:** Connection **Related Concepts:** Point of view, Setting, Theme	**Souseki** **Global Context:** Personal & Cultural Expression **Key Concept:** Perspective **Related Concepts:** Character, Theme, Self-expression
Grade 11	**Part One: Language and cultural Context** **Learning Outcomes**: - Analyse how audience and purpose affect the structure and content of texts. - Analyse the impact of language change. - Demonstrate an awareness of how language and meaning are shaped by culture and Context. Topics: History and Evolution, Language and Gender, Language and the individual, Language and Power **Texts:** various non-fiction and literary texts. 'Nihongo to Gaikokugo' by Takao Suzuki		**Part Four: Literature Critical Study** **Learning Outcomes**: - Explore literary works in detail - Analyse elements such as theme and the ethical stance or moral values of literary texts. - Understand and make appropriate use of literary terms. **Texts:** 'Okuno Hosomichi" by Basho Matsuo (SL and HL), 'Kokoro' by Souseki Natsume (SL and HL) 'Short Stories: Rashoumon, Hana, Imogayu, Kumono ito'(HL only)	
Grade 12	**Part One: Language and cultural Context** **Learning Outcomes**: - Analyse how audience and purpose affect the structure and content of texts. - Analyse the impact of language change. - Demonstrate an awareness of how language and meaning are shaped by culture and Context. Topics: History and Evolution, Language and Gender, Language and the individual, Language and Power **Texts:** various non-fiction and literary texts. 'Nihongo to Gaikokugo' by Takao Suzuki		**Part Four: Literature Critical Study** **Learning Outcomes**: - Explore literary works in detail - Analyse elements such as theme and the ethical stance or moral values of literary texts. - Understand and make appropriate use of literary terms. **Texts:** 'Okuno Hosomichi" by Basho Matsuo (SL and HL), 'Kokoro' by Souseki Natsume (SL and HL) 'Short Stories: Rashoumon, Hana, Imogayu, Kumono ito'(HL only)	

Ｇ７　ユニット１：　「宣伝」

- 段落に注目して文章を読む
- 問題提起と答えの文章に着目し、構成をとらえる
- 文章中の言葉の意味を正しく捉え内容理解をふかめる
- 新聞やインターネットで情報を調べ、内容を読み取る
- 調べた情報を簡潔にわかりやすくまとめ文章にして書く。
- ポスターやパンフレットを作り、視覚面からも伝える工夫をする。
- わかりやすい発表の仕方について考えプレゼンテーションをする
- プレゼンテーションの内容について話し合う。

Ｇ７　ユニット２：　文学「竹取物語」

- 随筆文と物語文の違いを考える。
- 仮名遣いに注意して音読し、古文の言葉の響きや調子に読み慣れる。
- 現代文に書き換えをし、内容を理解するとともに言葉の変遷の歴史にふれる。
- 竹取物語を読み内容を理解する。
- メッセージを手紙に書いてみる。
- 手紙の基本的な書式を理解する。
- 相手や目的をはっきりさせて手紙を書く。
- 中国の古典から現代にも伝えられている言葉を知る。

Ｇ７　ユニット３：　意見文「江戸からのメッセージ」

- 江戸時代の人々の生活について理解する。
- 現代の生活と比べてみる。
- 年中行事について、いろいろ調べてみる。
- 初めて知ったことについて資料などで調べてみる。
- 伝えたい人に読んでもらい感想を聞く。
- 伝える相手によりまとめ方を工夫してみる。

Ｇ７　ユニット４：　詩

- 声を届けるということを意識して詩を朗読する。
- 詩の持つイメージを膨らませ絵で表現する
- ポピュラーミュージックの歌詞を読み、そこで語られているものを感じる。
- 詩を創作する。
- 修辞法を学ぶ。
- 詩を分析し、小論文を書く
- クラス詩集を作り上げる。

K. International School Tokyo – Design Scope and Sequence Grades 6-8

	Unit I	Unit II	Unit III	Unit IV
Grade 6	*Safety in Secondary* Global Context: **Identities and relationships** Key Concept: **Communication** Related Concept: **Perspective, Sustainability** Program(s) used: **PowerPoint/Prezi** Students will focus on research on their daily use of Technology and hazards that their increased use of Technology as they grow may bring.	*Game On!* Global Context: **Scientific and Technical Innovation** Key Concept: **Systems** Related Concept: **Function** Program(s) used: **Game-Maker 8.1** Students will design and create their own videogame, using the Game-Maker 8.1 program.	*RoboSumo* Global Context: **Scientific and Technical Innovation** Key Concept: **Systems** Related Concept: **Function, Form** Program(s) used: **Lego Mindstorms – Ev3** Students will focus on planning, building, programming and evaluating a robot for a tournament, working in teams of 2-3 students.	*Lights, Camera, Action! (IDU – English)* Global Context: **Personal and Cultural Expression** Key Concept: **Communication** Related Concept: **Function, Form** Program(s) used: **Filmora, Audacity** Students will create a short Movie Trailer for the Sakura Medal books that they are reading during English Independent Reading.

Grade 7	*Robo-Jousting* Global Context: **Scientific and Technical Innovation** Key Concept: **Systems** Related Concept: **Function, Form** Program(s) used: **Lego Mindstorms – Ev3** Students will focus on planning, building, programming and evaluating a robot for a tournament, working in teams of 2-3 students.	*Life Online* Global Context: **Identities and Relationships** Key Concept: **Communities** Related Concept: **Perspective** Program(s) used: Students investigate the dangers of online life as they become old enough to sign-up for Social Media. Discussing Screen Time, 'I want to be famous', Choosing to be Offline, Trolling and Pornography.	*(TBC) Rollercoaster of a Website (IDU w/ English)* Global Context: **Scientific and Technical Innovation** Key Concept: **Systems** Related Concept: **Function, Innovation** Program(s) used: **Notepad ++** Students will plan and create a HTML and CSS website for a fictional theme park, which will be demonstrated as part of their English Exhibition.	N/A
Grade 8	*Playing the Market* Global Context: **Globalization and Sustainability** Key Concept: **Systems** Related Concept: **Markets and Trends, Resources**	*Coding is an Art!* Global Context: **Scientific and Technical Innovation** Key Concept: **Systems** Related Concept: **Function, Innovation**	*Design your Future* Global Context: **Scientific and Technical Innovation** Key Concept: **Development**	N/A

	Program(s) used: **Microsoft Excel** Students will use real-life stock market information to program and maintain a stock portfolio using Spreadsheets and Formulas.	Program(s) used: **Processing, GIMP 2, Photoshop Elements, Pixlr, MS Paint** Students will research the effect that Photoshop culture can have on our daily lives, and program their own image editing program.	Related Concept: **Resources** Program(s) used: **Internet, Destiny Discover, Email** Students will look ahead to how Design classes will help them in the future, with an emphasis on their upcoming Personal Project, and the relevance of the Design Cycle.	

Prescribed Learning Outcomes

Grade 7	
Research	*Students will:* • Explain the need for their Presentation (unit II)/website (unit III), based on the design situation, and justify the explanation • Analyze existing Digital Citizenship PSAs (unit II)/websites (unit III) and describe how it will help their own work • Create a list of research questions about creating a PSA (unit II)/website (unit III) in order of importance, and use that list to guide research • Identify proper resources for research, and justify their selection as proper resources • Distinguish the difference between primary and secondary resources, and the benefits of each • Organize data from research, based on level of importance
Planning	*Students will:* • Create a list of specifications, based on their research, which outlines the requirements for an effective Robot (unit I)/website (unit II) • Be able to create storyboards to present their various design ideas (unit I)/be able to create webpage layouts to present their various ideas (unit III) • Be able to use their specifications to identify their best idea • Create a website outline and map for their final website (unit III) idea
Creating	*Students will:* • Create a step-by-step plan for creating their website (unit III)/robot (unit I), including information on time and resources needed for each task • Demonstrate specific skills with Lego Robotics with respect to creating a base robot, offensive/defensive attachments, working to set rules/requirements, programming both robot and attachments and ability to follow plan created (Unit I) • Demonstrate specific skills with HTML with respect to creating page with text and/or links and saves as html document, embedding pictures and video, colour schemes for fonts and background, embedding links connecting different pages in the website, and ability to follow plan created (Unit III)
Evaluating	*Students will:* • Know how to use various testing methods (surveys, questionnaires, tests/quizzes) to determine if their robot (unit I)/website (unit III) was successful • Be able to interpret data collected from testing methods and use data to explain the level of success of their robot (unit I)/website (unit III)

Digital Citizenship Outcomes

Grade 7 Digital Citizenship Outcomes	
Privacy and Security	*Students will:* • Learn about joining social media, what information to upload and what information already exists about them on such networks • I want to be Famous – YouTuber culture • Learn to keep their password private from everyone but their parents • Learn about scams and false information and how to recognize them • Learn common passwords to avoid using
The Internet and You	*Students will:* • Learn how to use the advanced features of Google and other search engines to more effectively find information • Discuss the amount of screen time that is appropriate • Learn to use various features of technology to help keep themselves organized in school and beyond • Learn and recognize the impact their digital footprints can have on their physical lives now and in the future • Being a respectful Digital Citizen through comments and online interactions • Pornography/Relationships Online
Creative Credit & Copyright	*Students will:* • Learn how to avoid falling into the Copy & Paste culture • Learn how to properly give credit to creators of work and information • Learn how to appropriately reference sources of information • Discover resources to help them find and use copyright-free material • Learn the differences between international Copyright law and Fair-Use
Internet Safety	*Students will:* • Learn how to stay safe online, what to do if they see/hear something that makes them uncomfortable • Learn how to judge the reliability of information they find on the internet • Discuss Cyberbullying, the act and consequences • Gender Stereotypes Online, Digital Drama • Be able to recognize and avoid Internet Vigilantism

K. International School Tokyo – Visual Art Scope and Sequence Grades 6-10

	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10

Unit 1	Self-Image
	
	Global Context:
	Key Concept: Personal and Cultural Expression
	Focus Artists/Forms: Van Gogh, Frida Kahlo, Portraiture, Visual Recording.
	Media: Graphite, Watercolour, Pencil Crayon
		Fashion Fusion Kimono
		
		Global Context: Globalization and Culture
		Key Concept: aesthetic
		Focus Artists/Forms: Kimono, Ka mon, European heraldry.
		Media: pencil, paint, print
			Graphic packaging
			
			Global Context: sustainabillity
			Key Concept: Change
			Focus Artists/Forms: Cubism, keith Harring, Jon Burgerman.
			Media: Watercolour, acrylic, 3D paper construction.
				Contemporary Graffiti
				
				Global Context: Personal and cultural expression.
				Key Concept: Communication
				  Focus Artists/Forms: los bros, keith haring, typography, youth culture.
				  Media: Pencil crayon, acrylic, graphite.
					Fantasy and Imagination
					
					Global Context: Personal and Cultural Expression
					Key Concept: Aesthetics
					Focus Artists/Forms: Narrative, line and colour, Searle, Quentin Blake.
					Media: Ink, watercolour, pastel and digital .

Unit 2	Finder Keepers
	Objects and Collections
	
	Global Context: identities and relationships
	Key Concept: aesthetics
	Focus Artists/Forms: Curiosity cabinets, Michael Craig Martin
	Media: Graphite, Water colour, Acrylic, Clay Relief.
		Pop Graphics - Diorama
		
		Global Context: personal and cultural expression.
		Key Concept: Narrative
		Focus Artists/Forms: Quentin Blake, Stan Lee, Lichtenstein, perspective, Graphic novels, manga , comic books.
		Media: Mixed media, Aerosol paint , ink.
			Printed People
			
			Global Context: Aesthetics
			Key Concept: Personal and cultural expression
			Focus Artists/Forms: Matt Ward, German Expressionism. Kirchener , Munch
			  Media: Lino printing, Paper printing, Graphite, Ink.
				Culture Vs Subculture
				
				Global Context: Identities and relationships
				Key Concept: Identity
				Focus Artists/Forms: Delacroix, Fashion,
				  Media: Mixed, Painting, Drawing collage
					Self-Directed theme DESIGN
					
					Global Context: Identities and personal relationships
					Key Concept: Change
					Focus Artists/Forms: Various stimuli given on a range of open themes or conceptual ideas.
					Media: Various.

Unit 3 *Optional Unit may be substituted for unit 1 or 2.*	Fantasy Landscapes Global Context: Orientation in time and space Key Concept: Change Focus Artists/Forms: David Hockney Turner, Monet and Serat. Media: Pastel, collage, watercolour, Raised surface.	ID Collage Global Context: Identities and Relationships Key Concept: Identity Focus Artists/Forms: Poallozi, Hoch and Collage Media: Mixed media, paper, digital.			

Prescribed Learning Outcomes

		In order to:	**Students need to understand that:**	**What will students do in the classroom to help them arrive at the understandings and practise the skills necessary to meet the objectives?**
A	Knowing and Understanding			
i.		Demonstrate knowledge of the art form studied, including concepts, processes, and the use of appropriate language.	Describing and analysing art forms using specific terminologies and language help to convey artistic ideas.	• Use the visual elements and principles of art and design in written and visual forms. • Use the visual elements terminologies when writing about their own work and others.
ii.		Demonstrate knowledge of role of the art form in original or displaced contexts.	Social attitudes and historical happenings reflect and involve art forms of the time and age they are made.	• Explore and evaluate the artwork of artists in different time periods and cultures.
iii.		Use acquired knowledge to inform their artwork.	Use of specific terminology and utilisation of artistic techniques can inform and inspire personal visual work.	• Outline and present their own artwork and interpret their intentions using specific terminology.

		In order to:	**Students need to understand that:**	**What will students do in the classroom to help them arrive at the understandings and practise the skills necessary to meet the objectives?**
B	Developing Skills			
i.		Demonstrate the acquisition and development of skills and techniques of the art form studied.	Ongoing practise and experimentation with targeted practical media will enable development of skills.	• Explore different materials in a practical setting and experiment with materials more than once to refine the process.
ii.		Demonstrate the application of skills and techniques to create, perform and/or present art.	A wide range of tested media and experimental artistic practice can refine and develop skills.	• Explore different two dimensional and three dimensional materials in different combinations and experiment with varied practical outcomes.

	In order to:	Students need to understand that:	What will students do in the classroom to help them arrive at the understandings and practise the skills necessary to meet the objectives?
C	Thinking Creatively		
i.	Outline a clear and feasible artistic intention.	Identifying a clear and workable idea is fundamental to the creative process.	• Identify and formulate a clear idea that reflects a personal intention of the student based on the selected brief.
ii.	Outline alternatives, perspectives, and imaginative solutions.	Trying a range of possibilities before establishing a final outcome produces more creative and feasible solutions.	• Develop a range of different samples of possible visual outcomes using different material combinations and assess their success. • Demonstrate working with more than one material and individual experimentation.
iii.	Demonstrate the exploration of ideas through the developmental process to a point of realisation.	Identifying cyclical theoretical and practical experimentation and exploration of ideas help to realise a creative solution.	• Evaluate and present their own outcomes with self and others to then refine and develop their ideas further.

	In order to:	Students need to understand that:	What will students do in the classroom to help them arrive at the understandings and practise the skills necessary to meet the objectives?
D	Responding		
i.	Outline clear connections and transfer learning to new settings.	Identifying connections of ideas help to widen personal understanding and apply them to new ones.	• Use identified connections and ideas in groups and class to create a personal response guided by the studied art form. • Demonstrate these connections in written tasks.
ii.	Create an artistic response inspired by the world around them.	Artists and designers gain inspiration from everyday settings and the world around them.	• Explore different sources of inspiration in visual and written forms. • Identify and evaluate selected artists and art forms sources of inspiration to understand the visual process.
iii.	Evaluate the artwork of self and others.	Evaluating and assessing their work and others is helpful to the progression of skills and ideas.	• Critique and outline their finished product and that of others, using ongoing reflective processes.

K. International School Tokyo – Music Scope and Sequence Grades 6-10

Grade	Unit 1	Unit 2
Grade 6	**Title: Elements of Music** Through the activities of composing, improvising, performing, listening and appraising, students will understand what features make a satisfying melody. They will be able to compose their own melodies. Students will apply their knowledge and understandings of the elements of music to each of these activities. **Statement of Inquiry:** *Music is a language with universal appeal, but to think about and express our own interpretations, we must know and understand musical terminology.* **Key Concept:** Communication **Related Concepts:** Structure/Interpretation **Global Context:** Orientation in Space and Time	**Title: One Man's Legacy – The Story of Wolfgang Amadeus Mozart** Through watching some scenes from the movie Amadeus and the activities of listening and appraising, students will understand main features and genres of Classical Era. They will be able to operate with subject-specific terminology related to the features and genres common for Classical era. Students will apply their knowledge and understandings of the elements of music studied in Unit 1 to each of these activities. **Statement of Inquiry:** *Expressing our own artistic intentions in innovative ways changes artistic boundaries.* **Key Concept:** Aesthetics **Related Concepts:** Innovation/Boundaries **Global Context:** Identities and Relationships
Grade 7	**Title: Instruments of Western Symphonic Orchestra** **1 unit per semester (Part 1)** Through the activity of making musical instruments, students will gain knowledge of acoustics, understand how the materials they use will affect the sound, and experience the joy of invention. When this activity is completed, students will play their own instruments and experience being in an orchestra as a class together for the first time. **Statement of Inquiry:** *Instrumental tone-color is a powerful tool which reflects cultural identities and can be used for expression.* **Key Concept:** Communication **Related Concepts:** Presentation/Audience **Global Context:** Personal and Cultural Expression	**Title: Instruments of Western Symphonic Orchestra** **1 unit per semester (Part 2)** Through the activities of active listening and appraising, improvising and performing, each student will demonstrate knowledge and an understanding of different musical instruments. By the end of the unit students should be able to differentiate musical instruments of a symphonic orchestra acoustically and visually as well as describe and identify most common types of instrumental ensembles (e.g. symphony orchestra, chamber orchestra quartet, trio etc.) **Statement of Inquiry:** *Instrumental tone-color is a powerful tool which reflects cultural identities and can be used for expression.* **Key Concept:** Communication **Related Concepts:** Presentation/Audience **Global Context:** Personal and Cultural Expression
Grade 8	**Title: Graphic Notation** Through the activities of composing, performing, listening and appraising, students will understand how to operate with graphic notation. They will be able to compose, record and perform their own music pieces based on the notation created by themselves. **Statement of Inquiry:** *Music is a universal communicating tool but to store it for future performances, different methods might be used.* **Key Concept:** Aesthetics	**Title: Human Voice** Through the activities of researching, ensemble performing, active listening and appraising, students will get to know the possibilities of their own voices, various operatic and pop voices, as well as different vocal and vocal-instrumental music examples representing the variety of vocal music genres. **Statement of Inquiry:** *Human voice is the most powerful tool in communicating ideas and expressing opinions.* **Key Concept:** Communication

	Related Concepts: Interpretation//Expression **Global Context:** Personal and Cultural Expression		**Related Concepts:** Expression/Presentation **Global Context:** Personal and Cultural Expression
Grade 9	**Title: Music as a Language** Through the activities of composing, improvising, performing, listening and appraising, students will understand how specific composing devices used in a certain way can deliver a particular message to the audience. Non-verbal ways of communication are able to send the message as well as verbal. Students will compose a piece of music and perform it in groups. **Statement of Inquiry:** *Interests and passions can be expressed through the arts and shared with the community.* **Key Concept:** Communication **Related Concepts:** Expression/Audience **Global Context:** Personal and Cultural expression		**Title: Jazz** Through the activities of performing, improvising, listening and appraising, students will be able to recognize and understand how to improvise using the 12-bar blues. Students will research and analyze how jazz pieces are different from classical music. **Statement of Inquiry:** *Experimenting with aesthetics and specific patterns can lead to innovative ways of expressing ourselves.* **Key Concept:** Aesthetics **Related Concepts:** Composition/Genre **Global Context:** Scientific and Technical Innovation
Grade 10	**Title: Music as Background** Students will learn that specific compositional devices used in a certain way can highlight the effects of human acting in movie scenes. Students will compose original musical accompaniment to a silent movie clip. **Statement of Inquiry:** *The way we create and communicate reflects our personal and cultural values.* **Key Concept:** Communication **Related Concepts:** Composition/Audience **Global Context:** Personal and Cultural Expression		**Title: Music of the World** Students will learn traditional music from around the world to develop their musical knowledge and listening skills. As a part of the assessment, students are required to research one of the world's music traditions, write a report and give a presentation. This will allow students to show their understanding of a musical culture and the meaning of a particular music to the people who practice it. **Statement of Inquiry:** *Music is a form of communication which can provide insight into societal relationships with the world.* **Key Concept:** Communication **Related Concepts:** Expression/Audience **Global Context:** Personal and Cultural expression

Grade 7

Criteria A	In order to:	Students will understand	Students will be able to
i.	Demonstrate knowledge of the art form studied, including concepts, processes, and the use of appropriate language.	The role of specific instruments within the different instrument families, and the role of the different instrument families within the larger orchestra.	Classify the instruments of the modern Western Symphony Orchestra according to instrument families. Describe the role of each instrument family within the larger context of the symphony orchestra.
ii.	Demonstrate knowledge of role of the art form in original or displaced contexts.	The history and evolution of the Western Symphony Orchestra, and its different manifestations in contemporary contexts.	Imagine ways in which the considerations of sound and proportion in the modern symphony orchestra can be utilized and applied to personal musical projects, in varied contexts.
iii.	Use acquired knowledge to inform their artwork.	Common principles of sound-making within orchestral families	Develop a plan for a DIY musical instrument.

Criteria B	In order to:	Students will understand	Students will be able to
i.	Demonstrate the acquisition and development of skills and techniques of the art form studied.	The principles of sound-making in the Western Orchestra instruments, and the relevance of these principles to the construction of DIY Musical instruments, as well as to the carrying out of listening tasks	Utilize the common sound-making principles of Western Musical Instruments in the creation of their own DIY Musical instruments. Classify examples of music through listening, with regard to genre and performance type.
ii.	Demonstrate the application of skills and techniques to create, perform and/or present art.	The issues involved in the selection, preparation and use of materials in constructing DIY Musical Instruments.	Demonstrate the sound quality of their DIY Musical instrument, through an improvisatory performance.

Criteria C	In order to:	Students will understand	Students will be able to
i.	Outline a clear and feasible artistic intention.	The different levels of planning needed to enact the DIY project.	Plan with respect to multiple dimensions, including consideration of the material, temporal, fiscal, and practical dimensions of instrument construction.
ii.	Outline alternatives, perspectives, and imaginative solutions.	The necessity of balancing priorities against limitations in the carrying out of the DIY project, especially with regard to supplies, costs, and time restrictions.	Work through and resolve issues arising due to situational limitations. Incorporate feedback from peers into the problem solving endeavor. Track their own artistic progress through the daily maintenance of their Process Journals.
iii.	Demonstrate the exploration of ideas through the developmental process to a point of realization.	Ways of presenting and evaluating their own products, as well as of providing constructive feedback to their peers	Apply appropriate terminology to show aesthetic and critical awareness necessary for designing DIY Musical Instrument in terms of its sound and main elements of its construction

Criteria D	In order to:	Students will understand	Students will be able to
i.	Outline clear connections and transfer learning to new settings.	The various issues involved in the application of developed skills, techniques and processes to the practice of a live performance.	Apply developed skills, techniques and processes to the performance of a piece of music, as well as use ensemble skills, (balance, intonation, rhythmic unity) while performing as part of a group.
ii.	Create an artistic response inspired by the world around them.	How various playing techniques elicit different responses in themselves, and in their peers. The value of experimentation in discovering effective performance techniques and strategies.	Confidently engage in solo and group public performances, thereby demonstrating the fruits of their artistic labor, and stimulating new questions for further artistic development.
iii.	Evaluate the artwork of self and others.	Some aspects of the musician/audience relationship.	Evaluate some aspects of the musician/audience relationship and formulate constructive criticism.

K. International School Tokyo – Physical and Health Education Overview – Scope and Sequence - **Grades 6 – 10**

Grade	Unit 1 - Team and International Pursuits	Unit 2 – Individual Pursuits
6	**Fundamentals of Sending, Receiving and Moving through Small Group Games, Indoor Target Games, Striking and Fielding** Global Context – Globalization and Sustainability Key Concepts – Form and Connection Related Concept(s) – Movement, Function and Refinement	**Fundamentals of Sending, Receiving and Moving through Athletics, Badminton and Tennis** Global Context – Globalization and sustainability Key Concepts – Chance Related Concept(s) –Adaptation, Choice and Environment.
7	**Fundamental to Intermediate Sending, Receiving and Moving through** **Basketball , Flag Football and Hockey** **Embedded Fitness and Dance** The Fundamentals of the game Global Context – Orientation in space and time Key Concepts – Relationships Related Concept(s) – Development, Movement, Pattern, Balance	**Fundamentals to Intermediate Sending, Receiving and Moving through** **Athletics, Badminton and Tennis** **Embedded Fitness and Dance** The Fundamentals of the game Global Context – Fairness and Development Key Concept – Change Related Concept(s) – Perspective, Choice
8	**Intermediate Sending, Receiving and Moving through** **Volleyball, Cricket and Lacrosse** **Embedded Fitness and Dance** Global Context – Orientation in space and time Key Concepts – Relationships Related Concept(s) – Development, Movement, Pattern, Balance	**Intermediate Sending, Receiving and Moving through** **Athletics, Badminton and Tennis** **Embedded Fitness and Dance** Global Context – Globalization and sustainability Key Concept – Change Related Concept(s) – Environment, Adaptation
9	**Intermediate to Advance Sending, Receiving and Moving through** **Basketball, Flag Football and Hockey** **Embedded Fitness and Dance** Global Context – Fairness and development Key Concept – Change Related Concept(s) – Perspectives, Choice	**Intermediate to Advance Sending, Receiving and Moving through** **Athletics, Badminton and Tennis** **Embedded Fitness and Dance** Global Context – Personal and cultural expression Key Concept – Change Related Concept(s) – Refinement, Movement, Pattern
10	**Advance Sending, Receiving and Moving through** **Volleyball, Hockey, and Cricket** **Embedded Fitness and Dance** Camp Organization and administration Global Context – Fairness and development Key Concept – Change Related Concept(s) – Development Perspectives, Choice	**Advance Sending, Receiving and Moving through** **Embedded Fitness and Dance** Camp Organization and administration Global Context – Identities and relationship Key Concept – Communication Related Concept(s) – Interaction, Perspective, Adaptation

Grade 7 - Prescribed Student Outcome	
Unit 1	Unit 2
Fundamental to Intermediate Sending, Receiving and Moving through **Basketball, Flag Football and Hockey** **Embedded Fitness and Dance** The Fundamentals of the game Global Context – Orientation in space and time Key Concepts – Relationships Related Concept(s) – Development, Movement, Pattern, Balance	**Fundamentals to Intermediate Sending, Receiving and Moving through** **Athletics, Badminton and Tennis** **Embedded Fitness and Dance** The Fundamentals of the game Global Context – Fairness and Development Key Concept – Change Related Concept(s) – Perspective, Choice

Knowledge	• demonstrate an understanding of the basic components of basketball while applying offensive tactical solutions to increase their chances of success as they participate in basketball-related activities send, receive and retain basketballs, adjusting for speed and distance as they participate in a variety of activities • demonstrate an understanding of offensive strategies, specifically the give and go and ball fake, as they apply to basketball and similar territory games. • demonstrate understanding of the first, second and third stage in the RICE treatment of minor injuries • apply tactical solutions to increase chances of success while participating actively and safely in territory games. • demonstrate an understanding of the skill components of short and middle distance running activities • review and perform strategies for successful javelin throw • coordinate racquet and ball handling skills with various locomotor movements • use a variety of different badminton shots to set up for and defend against the attack

Skill	• send, receive and retain a variety of objects in a variety of situations while travelling in different pathways and at different speeds in relation to others and equipment • communicate effectively with peers, both verbally and non-verbally, to help develop successful skills and strategies • perform the movement skills and strategies to make them more successful in territory games • use skills and strategies to play more effectively in modified basketball activities. • participate actively in a wide variety of activities while performing locomotor movements moving around others • send and receive a ball (through passing) using ball hockey sticks, adjusting for speed, while applying basic principles of movement in a modified game of ball hockey • demonstrate an understanding of the phases of movements and apply this understanding as they actively participate in a variety of locomotor movements, including smooth transfers of weight, in relation to others and equipment • perform the forehand using proper form and technique • understand point of contact when striking a ball

Attitudes	• apply a variety of tactical solutions to increase their chances of success during basketball-related activities • actively participate in sustained activities at a moderate to vigorous level for at least 20 minutes

	- behave appropriately to maximize their safety and that of others during physical activity - build healthy relationships by applying appropriate collaboration skills - apply tactical solutions to increase chances of success - use self-awareness and self-monitoring skills to assist them as they demonstrate behaviors that promote their safety and that of others as they participate actively in various sustained moderate to vigorous activities - communicate effectively with classmates while providing verbal feedback - apply relationship and social skills while assessing their peers in a variety of activities.