Grade 10 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!

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Secondary School Principal.

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

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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

K. International School Tokyo – Mathematics Standard Level Scope & Sequence (Grade 10)
Textbook: Mathematics for the International Student 10 (MYP 5) (3rd edition)

Branch 1 – Number

Number Sequences – 10.16
- Given the start of a number sequence (integers, fractions), state the next ... terms
- Show that a number sequence is arithmetic or geometric.
- Find the formula for the general term (arithmetic or geometric sequences; can be given the start of the sequence or any two non-consecutive terms). Using this to find the nth term in the sequence.
- Determining whether a particular number is a member of the sequence.
- Given three consecutive arithmetic terms in k, find the value of k. Finding the first term of the sequence that exceeds ...
- Given the starting term and the recurrence relationship, find the next ... terms in the sequence.
- Given the starting term and the recurrence relationship, find the explicit formula for u_n
- Find the sum of the terms of an arithmetic series
- Find the sum of the terms of a geometric series
- Find the sum of the terms of an infinite geometric series

Branch 2 – Algebra

Graphs of Quadratic, Cubic and Rational Functions – Old Edexcel Book 1 – Graphs Unit 4, Old Edexcel Book 2 – Algebra Units 2 & 3, Graphs Unit 1 & 2
- Completing tables of values and drawing graphs of quadratic functions (A.3.3)
- Solving quadratic inequalities in one unknown and representing the solution set on a number line (A.2.8)
- 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)
- Plotting and drawing graphs with equation $y = Ax^3 + Bx^2 + Cx + D + \frac{E}{x} + \frac{F}{x^2}$ in which (i) the constants are integers and at least three of them are zero (ii) the letters x and y can be replaced with any other two letters* (A.3.3)
- Solving exactly, by elimination of an unknown, two simultaneous equations in two unknowns, one of which is linear in each unknown and the other is linear in one unknown and quadratic in the other (A.2.7)
- Solving exactly, by elimination of an unknown, two simultaneous equations in two unknowns, one of which is linear in each unknown and the other is linear in one unknown and the other is of the form $x^2 + y^2 = r^2$ (A.2.7)
- Finding the intersection points of two graphs, one linear (y_1) and one non-linear (y_2) and recognising that the solutions correspond to $y_2 - y_1 = 0$ (A.3.3)

Quadratic Functions – 10.20
- Identifying functions as quadratic or not quadratic.
- Given a quadratic function, find the value of y when x = ...
- Given a point and a quadratic function, state whether the point lies on the function. Given a quadratic function, find the value of x when y = ...
- Word problems involving these parameters.
- Given a quadratic function, create a table of values and hence draw the graph of the function
- Given a quadratic, sketch its graph by applying transformations (translations, reflections, 'stretching/ compressing') to the basic quadratic function $y = x^2$.
- Given a quadratic function, write it in the form $y = (x - h)^2 + k$ by completing the square, and hence sketch the graph (stating the coordinates of the vertex).
- Given a quadratic function find its x-intercepts and/or its y- intercept. Sketching the quadratic function using the axes intercepts.
- Given a quadratic function, find its axis intercepts, the equation of its axis of symmetry, and the coordinates of the vertex; and use these to sketch the graph of the function.
- Given the axis of symmetry and one of the x-intercepts, find the other x-intercept. Given the axes intercepts, sketch the graph and then find the axis of symmetry.
- Given a quadratic function, find the maximum/ minimum value and give the value of x at which it occurs. Word problems involving these parameters.

Transforming Functions – Haese Mathematics SL – Chapter 5B-F, Edexcel Mathematics A Chapter 26.3-26.4
- Translations $y = f(x) + b$ and $y = f(x - a)$
- Stretches $y = pf(x)$ and $y = f(qx)$
- Reflections $y = -f(x)$ and $y = f(-x)$
- Word problems involving these parameters.
- Consecutive transformations

Exponential Functions and Logarithms – 10.18
- Given an exponential function in x and a value for x, find the corresponding value for y.
- Completing a table of values. Using this to graph exponential functions.
- Given an exponential function and a transformation, find the image function.

- Given an exponential growth function, find the initial population; the corresponding 'y' values for a series of 'x' values, and use these to sketch a graph of the function.
- Given an exponential decay function, find the initial population; the corresponding 'y' values for a series of 'x' values, and use these to sketch a graph of the function.
- Given an equation where x (or an expression in x) is the exponent in one or more places, make each side of the equation have the same base and equate indices to solve.
- Using the algebraic expansion rules to expand and simplify exponential expressions. Using the factorisation rules to factorise exponential expressions. Simplifying fractions with exponential expressions (may need to factorise first). Using these to solve exponential equations.
- Given a number, write it in the form 10loga (may need a calculator). Using logarithms to solve exponential equations. Word problems involving these.
- Using the logarithm laws to simplify logarithmic expressions. Equations with logarithmic equations in base 10. Working with logarithms in other bases.
- Graphs of logarithmic functions.

Inequalities – 10.22

- Given a number line, write what it shows in interval or square bracket notation (and vice versa).
- Using interval notation or square bracket notation to describe inequalities.
- Given a graph, draw the sign diagram. Given a function, draw the sign diagram (can be quadratic or rational, may need factorising to find critical values)
- Solve inequalities involving quadratic functions, rational functions, functions involving radicals

Calculus – Edexcel Mathematics A Chapter 28

- Finding the gradients of non-linear graphs by drawing a tangent (A.3.3)
- Understanding the concept of a variable rate of change (A.3.4)
- Differentiating integer powers of x (A.3.4)
- Determining gradients, rates of change, maxima and minima by differentiation and relating these to graphs (A.3.4)
- Applying calculus to linear kinematics and to other simple practical problems (A.3.4)

Algebraic Proofs – Edexcel Mathematics A Chapter 23.6

- Proofs using algebra (A.2.2)

Branch 3 – Geometry and Trigonometry

Vectors – 10.17

- 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)

Advanced Trigonometry – 10.21

- Converting between radians and degrees (may need to use a calculator).
- Using a unit circle diagram to find the sine and cosine of any angle (in degrees or in radians) Given the sine or cosine and the quadrant the angle lies in, find the other ratio.
- Using the symmetry of the unit circle to find sin/cos/tan of multiples of 30° and 45°. Given the value of sin θ, cos θ or tan θ and the domain of θ, find the value of θ. Using a graph of y = sin θ or y = cos θ to estimate sin θ and cos θ for a particular value of θ.
- Sketching the graphs of functions using sine, cosine and tangent, using the basic function and transformations (and without using technology). Given the function, find the period.
- Given a table of values, fit a sine and cosine model to the data without using technology. Given a scenario, devise a sine model to fit.
- Solving trigonometric equations in sin θ, cos θ or tan θ. Solving trigonometric equations where some rearranging is necessary (usually over $0 \leq \theta \leq 2\pi$).
- Using negative/complementary angle formulae to simplify trigonometric expressions.
- Using addition formulae to simplify trigonometric expressions.

Branch 4 – Statistics and Probability

Statistics – 10.9

- 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)
- Understanding the concept of a measure of spread (A.6.2)
- Estimating the quartiles and the interquartile range from given data or from a cumulative frequency diagram (A.6.2)

* Supplement with (Edexcel Book 2 – Handling Data Unit 3)

Bivariate Statistics – 10.21

- Drawing and interpreting scatter plots
- Understanding the concept of correlation between two variables
- Measuring correlation using Pearson's product-moment correlation coefficient and the coefficient of determination.
- Drawing a line of best fit by eye for a set of data and by using linear regression
- Understanding and interpreting interpolation and extrapolation

Review of Topics in Preparation for the IGCSE Exam

Review of Prior Learning Topics in Preparation for the Diploma Programme

K. International School Tokyo – Mathematics Extended Scope & Sequence (Grade 10)
Textbook: Edexcel International GCSE Further Pure Mathematics Student Book (Pearson)

Branch 1 – Number

1. Logarithmic Functions and Indices

- The functions a^x and $\log_b x$ (where b is a natural number greater than one) (F.1)
  - A knowledge of the shape of the graphs of a^x and $\log_b x$ is expected, but not a formal expression for the gradient.
- Properties of indices and logarithms including change of base (F.1)

To include:

- $\log_a xy = \log_a x + \log_a y$
- $\log_a \frac{x}{y} = \log_a x - \log_a y$
- $\log_a x^k = k \log_a x$
- $\log_a \frac{1}{x} = -\log_a x$
- $\log_a a = 1$
- $\log_a 1 = 0$
- The solution of the equations of the form $a^x = b$
- Students may use the change of base formulae:
- $\log_a x = \frac{\log_b x}{\log_b a}$
- $\log_a b = \frac{1}{\log_b a}$

- The meaning of $y = e^x$ and natural logarithms. Properties of natural logarithms including (Haese HL.4.4):
  - $\ln xy = \ln x + \ln y$
  - $\ln \frac{x}{y} = \ln x - \ln y$
  - $\ln x^k = k \ln x$
- Growth and decay (Haese HL.4.8)
- Simple manipulation of surds (F.1)
  - Students should understand what surds represent and their use for exact answers.
  - Manipulation will be very simple. For example:
  - $5\sqrt{3} + 2\sqrt{3} = 7\sqrt{3}$
  - $\sqrt{48} = 4\sqrt{3}$
- Rationalising the denominator where the denominator is a pure surd (F.1)
  - $10 \times \frac{1}{\sqrt{5}} = 2\sqrt{5}$

5. Series

- Use of the $\sum$ notation (F.5)
  - The $\sum$ notation may be employed wherever its use seems desirable.
- Arithmetic and geometric series (F.5)
  - The general term and the sum to *n* terms of an arithmetic series are required.
  - The general term of a geometric series is required.
  - The sum to *n* terms of a finite geometric series is required.
  - The sum to infinity of a convergent geometric series, including the use of $|r| < 1$ is required.
  - Proofs of these are not required.

6. Binomial Series

- Use of the binomial series $(1 + x)^n$ (F.6)

Use of the series when:

- (i) *n* is a positive integer
- (ii) *n* is rational and $|x| < 1$.
- The validity condition for (ii) is expected.

- Use of the binomial expansion $(a + b)^n$ (Haese HL.8.6, 8.7)
  - Application of the binomial theorem
  - Product of two expansions
  - Binomial expansions as approximations

Branch 2 – Algebra

2. The Quadratic Function

- The manipulation of quadratic expressions (F.2)
  - Students should be able to factorise quadratic expressions and complete the square.
- The roots of a quadratic equation (F.2)
  - Students should be able to use the discriminant to identify whether the roots are equal real, unequal real or not real.
- Simple examples involving functions of the roots of a quadratic equation (F.2)
  - Students are expected to understand and use:
  - $ax^2 + bx + c = 0$ has roots $\alpha, \beta = \frac{-b \pm \sqrt{b^2-4ac}}{2a}$
  - forming an equation with given roots, which are expressed in terms of α and β: $\alpha + \beta = -\frac{b}{a}$ and $\alpha\beta = \frac{c}{a}$

3. Identities and Inequalities

- Simple algebraic division (F.3)
  - Division by $(x + a), (x - a), (ax + b)$ *or* $(ax - b)$ will be required.
- The factor and remainder theorems (F.3)
  - Students should know that if $f(x) = 0$ when $x = a$, then $(x - a)$ is a factor of $f(x)$.
  - Students may be required to factorise cubic expressions such as: $x^3 + 3x^2 - 4$ and $6x^3 + 11x^2 - x - 6$,when a factor has been provided.
  - Students should be familiar with the terms 'quotient' and 'remainder' and be able to determine the remainder when the polynomial $f(x)$ is divided by $(ax + b)$ or $(ax - b)$.
- Solutions of equations, extended to include the simultaneous solution of one linear and one quadratic equation in two variables (F.3)
  - The solution of a cubic equation containing at least one rational root may be set.
- Simple inequalities, linear and quadratic (F.3)
  - For example $ax + b > cx + d$
  - $px^2 + qx + r < sx^2 + tx + u$
- The graphical representation of linear inequalities in two variables (F.3)
  - The emphasis will be on simple questions designed to test fundamental principles.
  - Simple problems on linear programming may be set.

4. Graphs

- Graphs of polynomials and rational functions with linear denominators (F.4)
  - The concept of asymptotes parallel to the coordinate axes is expected.
- The solution of equations (which may include transcendental functions) by graphical methods (F.4)
  - Non-graphical iterative methods are not required.

9. Calculus

- Differentiation from first principles (Haese HL. 17.6)
- Differentiation of functions of powers of x (F.9)
  - No formal proofs of the results for $ax^n, sin\ ax, cos\ ax\ and\ e^{ax}, \ln x$ will be required.
- Differentiation of composite functions $(ax + b)^n, \sin ax, \cos ax, \tan ax, e^{ax}, \ln f(x)$ (F.9)
- Differentiation using chain rule, product rule and quotient rule (F.9)
- Applications to simple linear kinematics and to determination of areas and volumes (F.9)
  - Understanding how displacement, velocity and acceleration are related using calculus.
  - The volumes will be obtained only by revolution about the coordinate axes.
  - The volumes of revolution of region between two curves about the coordinate axes.
- Stationary points (F.9)
  - Using sign test and second derivative to classify turning/stationary points
  - Point of inflexion, general point of inflexion (Haese HL. 19.3)
- Maxima and minima (F.9)
  - Maxima and minima problems may be set in the context of a practical problem (optimisation).
  - Justification of maxima and minima will be expected.
- The equations of tangents and normals to the curve $y = f(x)$ (F.9)
  - $f(x)$ may be any function which the students are expected to be able to differentiate.
- Application of calculus to rates of change and connected rates of change (F.9)
  - The emphasis will be on simple examples to test principles.
  - Knowledge of $dy \approx \frac{dy}{dx} dx$ for small dx is expected.
- Integration of composite functions using reverse chain rule (Cambridge SL. 15.1)
- Integration using trigonometric identities (Cambridge HL. 19.6)
- Integration by substitution (Cambridge SL. 15.2)

Branch 3 – Geometry and Trigonometry

7. Scalar and Vector Quantities

- The addition and subtraction of coplanar vectors and the multiplication of a vector by a scalar (F.7)
  - Knowledge of the fact that if $\alpha_1\ \boldsymbol{a} + \beta_1 \boldsymbol{b} = \alpha_2 \boldsymbol{a} + \beta_2 \boldsymbol{b}$, where $\boldsymbol{a}$ and $\boldsymbol{b}$ are non-parallel vectors, then $\alpha_1 = \alpha_2$ and $\beta_1 = \beta_2$, is expected.
- Components and resolved parts of a vector (F.7)
  - Use of the vectors **i** and **j** will be expected.
- Magnitude of a vector (F.7)
- Position vector (F.7)
  - $\overrightarrow{AB} = \overrightarrow{OB} - \overrightarrow{OA} = \boldsymbol{b} - \boldsymbol{a}$

- Unit vector (F.7)
- Use of vectors to establish simple properties of geometrical figures (F.7)
    - The 'simple properties' will, in general, involve collinearity, parallel lines and concurrency.
    - Position vector of a point dividing the line *AB* in the ratio *m:n* is expected.

8. Rectangular Cartesian Coordinates

- The distance between two points (F.8)
    - The distance d between two points (x_1, y_1) and (x_2, y_2) is given by $d_2 = (x_1 - x_2)^2 + (y_1 - y_2)^2$.
- The point dividing a line in a given ratio (F.8)
    - The coordinates of the point dividing the line joining (x_1, y_1) and (x_2, y_2) in the ratio $m : n$ are given by $\left(\frac{nx_1+mx_2}{m+n}, \frac{ny_1+my_2}{m+n}\right)$
- Gradient of a straight line joining two points (F.8)
- The straight line and its equation (F.8)
    - The $y = mx + c$ and $y - y_1 = m(x - x_1)$ forms of the equation of a straight line are expected to be known.
    - The interpretation of $ax + by = c$ as a straight line is expected to be known.
- The condition for two lines to be parallel or to be perpendicular (F.8)

10. Trigonometry

- Radian measure, including use for arc length and area of sector (F.10)
    - The formulae $s = r\theta$ and $A = \frac{1}{2}r^2\theta$ for a circle are expected to be known.
- The three basic trigonometric ratios of angles of any magnitude (in degrees or radians) and their graphs (F.10)
    - To include the exact values for sine, cosine and tangent of 0°, 30°, 45°, 60°, 90° (and the radian equivalents), and the use of these to find the trigonometric ratios of related values such as 120°, 300°.
- Applications to simple problems in two or three dimensions (including angles between a line and a plane and between two planes) (F.10)
- Use of the sine and cosine formulae (F.10)
    - General proofs of the sine and cosine formulae will not be required.
    - The formulae are expected to be known.
    - The area of a triangle in the form $\frac{1}{2}\ ab\ sin\ C$ is expected to be known.
- The identity $\cos^2\theta + \sin^2\theta = 1$ (F.10)
    - $\cos^2\theta + \sin^2\theta = 1$ is expected to be known.
- Use of the identity $\tan\theta = \frac{\sin\theta}{\cos\theta}$ (F.10)
    - $\tan\theta = \frac{\sin\theta}{\cos\theta}$ will be provided when needed
- The use of the basic addition formulae trigonometry (F.10)
    - Formal proofs of basic formulae will not be required.
    - Questions using the formulae for $sin(A + B), cos(A + B), tan(A + B)$ may be set; the formulae will be provided, for example: $sin(A + B) = sinAcosB + cosAsinB$
    - Long questions, explicitly involving excessive manipulation, will not be set.
- The use of double angle formulae (Haese HL.13.4)
    - $\sin 2A = 2\sin A\cos A$
    - $\cos 2A = \cos^2\theta - \sin^2\theta = 2\cos^2\theta - 1 = 1 - 2\sin^2\theta$
    - $\tan 2\theta = \frac{2\tan\theta}{1-\tan^2\theta}$
- Solution of trigonometric equations for a given interval (F.10)

  Students should be able to solve equations such as:
    - $\sin\left(x - \frac{\pi}{2}\right) = \frac{3}{4}$ for $0 < x < 2\pi$
    - $\cos(x + 30°) = \frac{1}{2}$ for $-180° < x < 180°$
    - $\tan 2x = 1$ for $90° < x < 270°$
    - $6\cos^2 x° + \sin x° - 5 = 0$ for $0° < x < 360°$
    - $\sin^2\left(x + \frac{\pi}{6}\right) = \frac{1}{2}$ for $-\pi < x < \pi$
- Transformation of trigonometric functions (Haese HL.12.1-12.5)
    - Horizontal and vertical translations
    - Horizontal and vertical stretches
    - Period $= \frac{2\pi}{b}\ or\ \frac{360°}{b}$

Branch 4 – Statistics and Probability

11. Statistics and Probability

- IQR, mean, variance and standard deviation
- Concept of discrete random variables and their probability distributions
- Concept of continuous random variables and their probability density functions
- Expected value (mean), mode, median, variance and standard deviation
- Binomial distribution, its mean and variance
- Poisson distribution, its mean and variance
- Normal distribution
    - Properties of the normal distribution
    - Standardization of normal variables

Review of Prior Learning Topics in Preparation for the Diploma Programme

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 9)

	In order to:	Students need to understand that:
Objective A: Analysing		
i	**Analyse** the content, context, language, structure, technique and style of text(s) and the relationship among texts	In order to analyse a text, the content, context, language, structure, technique, style of text and the relationship among texts need to be deconstructed and interpreted in detail
ii	**Analyse** the effects of the creator's choices on an audience	The creator's choices can position the audience to take on particular values, attitudes and beliefs
iii	**Justify** opinions and ideas, using examples, explanations and terminology	Opinions and ideas need to be supported with examples and explained using subject-specific terminology
iv	**Evaluate** similarities and differences by connecting features across and within genres and texts	Making connections between the similarities and differences across and within genres and texts involves critiquing the features in detail
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 sustained, coherent and logical manner	To communicate clearly, ideas and opinions need to be consistently ordered in a logical and coherent manner
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 genre, context and purpose
Objective C: Produce text		
i	**Produce** texts that demonstrate insight, imagination and sensitivity while exploring and reflecting critically on new perspectives and ideas arising from personal engagement with the creative process	Creators of texts can explore and reflect critically on 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 a register and style that serve the context and intention	The appropriate register and style of writing and speaking depends on the audience, context 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 10)

Textbook: Complete Biology, Chemistry & Physics IGCSE (3 separate textbooks)

Topic 1- Acid and Bases

Students will be taught:

Knowledge	Practical Skills & Processes:
Students will apply scientific knowledge to: • describe the use of the indicators litmus, phenolphthalein and methyl orange to distinguish between acidic and alkaline solutions • understand how the pH scale, from 0–14, can be used to classify solutions as strongly acidic, weakly acidic, neutral, weakly alkaline or strongly alkaline • describe the use of universal indicator to measure the approximate pH value of a solution • Define acids as sources of hydrogen ions, H+, and alkalis as sources of hydroxide ions, OH^- • predict the products of reactions between dilute hydrochloric, nitric and sulfuric acids; and metals, metal oxides and metal carbonates • understand the general rules for predicting the solubility of salts in water: *i. all common sodium, potassium and ammonium salts are soluble* *ii. all nitrates are soluble* *iii. common chlorides are soluble, except silver chloride* *iv. common sulfates are soluble, except those of barium and calcium* *v. common carbonates are insoluble, except those of sodium, potassium and ammonium* • calculate reacting masses using experimental data and chemical equations • carry out mole calculations using volumes and molar concentrations.	Students will develop and apply skills to: • ***Use Excel for data collection, processing and presenting.*** • Students will learn how titration techniques • Students will learn the use of indicators • describe experiments to prepare insoluble salts using precipitation reactions • describe experiments to carry out acid-alkali titrations. • describe experiments to prepare soluble salts from acids

Topic 2- Organics

Students will be taught:

Knowledge	Practical Skills & Processes:
Students will apply scientific knowledge to: • understand that crude oil is a mixture of hydrocarbons • describe and explain how the industrial process of fractional distillation separates crude oil into fractions	Students will develop and apply skills to: • ***Use Excel for data collection, processing and presenting.***

• recall the names and uses of the main fractions obtained from crude oil: refinery gases, gasoline, kerosene, diesel, fuel oil and bitumen • describe the trend in boiling point and viscosity of the main fractions • understand that incomplete combustion of fuels may produce carbon monoxide and explain that carbon monoxide is poisonous because it reduces the capacity of the blood to carry oxygen • understand that, in car engines, the temperature reached is high enough to allow nitrogen and oxygen from air to react, forming nitrogen oxides • understand that nitrogen oxides and sulfur dioxide are pollutant gases which contribute to acid rain, and describe the problems caused by acid rain • understand that fractional distillation of crude oil produces more long-chain hydrocarbons than can be used directly and fewer short-chain hydrocarbons than required and explain why this makes cracking necessary • explain the terms homologous series, hydrocarbon, saturated, unsaturated, general formula and isomerism. • recall that alkanes have the general formula C*n*H2*n*+2 • draw displayed formulae for alkanes with up to five carbon atoms in a molecule, and name the straight-chain isomers • recall the products of the complete and incomplete combustion of alkanes • describe the substitution reaction of methane with bromine to form bromomethane in the presence of UV light. • recall that alkenes have the general formula C*n*H2*n* • draw displayed formulae for alkenes with up to four carbon atoms in a molecule, and name the straight-chain isomers (knowledge of cis- and transisomers is not required) • describe the addition reaction of alkenes with bromine, including the decolourising of bromine water as a test for alkenes.	

Topic 3 – Reproduction and Pregnancy

Students will be taught:

Knowledge	**Practical Skills & Processes:**
• Asexual versus Sexual reproduction – pros and cons • Reproduction in plants	• Flower dissection and drawing • Making microscope slides of plant & animal cells, eg pollen • Use of microscopes

• Dissect a flower, draw and label it, know functions of parts of the flower and the whole plant. • Demonstrate understanding of flower functions:- fertilization, pollination, germination, seed structure, seed dispersal • Wind and insect pollination • Different methods of seed dispersal • Parts of the Human reproductive system, male and female, and functions of each part, sperm, ova, gametes • Demonstrate understanding of:- fertilisation, embryonic development, the placenta, the process of birth, breast feeding, hormainal control of the menstrual cycle by hormones • Outline causes, transmission, effects and prevention of HIV and AIDS • Methods of birth control, contraception, STD's Extension: • Chromosomes, basic DNA structure, genes, alleles, karyotypes, mutations • Mitosis • Meiosis	• Videos: Private Life of Plants – David Attenborough • Use of models to understand human anatomy • Demonstrations of types of contraception • Building model DNA

Topic 4- Genetics and Evolution

Students will be taught:

Knowledge	**Practical Skills & Processes:**
Students will apply scientific knowledge to: • Define chromosome, gene, allele, inheritance, diploid, haploid, mitosis, meiosis, genotype, phenotype, recessive, dominant, homozygous, heterozygous, mutation, natural selection, artificial selection, competition, evolution. • Describe the inheritance of sex in humans • State the roles of mitosis and meiosis • Use punnet grids to calculate and predict the outcomes of monohybrid crosses • Distinguish continuous and discontinuous variation with examples • Describe artificial selection, effects of radiation, sources of variation, competition, and how variation leads to evolution via natural selection. • Describe antibiotic resistance in bacteria as an example of how natural selection leads to evolution. **Possible extensions (time permitting)** • Draw a labelled diagram of DNA • Describe DNA replication • Describe protein synthesis	Students will be able to: 1. **Solve genetic problems regarding Mendelian monohybrid crosses, inheritance of sex, *ABO blood groups, codominance, and sex linkage*.** 2. **Be able to construct and explain a pedigree chart.** 3. **Solve genetic problems below the level of dihybrid crosses.** 4. Identify stages of mitosis or meiosis from diagrams and photomicrographs. 5. Examine onion root tip prepared slides under a light microscope *and determine the percentage of cells in each phase of mitosis.*

• Define codominance and multiple alleles and describe inheritance of human ABO blood groups as an example • Define sex linkage and describe inheritance of haemophilia as an example • Interpret pedigree charts	

Topic 5- Newtonian Mechanics

Students will be taught:

Knowledge	**Practical Skills & Processes:**
Students will apply scientific knowledge to: Measurements and uncertainties • State the fundamental units in the SI system • Distinguish between fundamental and derived units and give examples of derived unites • Convert between different units of quantities • State units in the accepted SI format • State values in scientific notation and in multiples of units with appropriate prefixes • Describe and give examples of random and systematic errors • Distinguish between precision and accuracy • Explain how the effects of random errors may be reduced • Calculate quantities and results of calculations to the appropriate number of significant figures • State uncertainties as absolute, fractional and percentage uncertainties • Identify uncertainties as error bars in graphs Kinematics • Define positon and frames of reference • Define displacement, velocity, speed and acceleration • Explain the difference between instantaneous and average values of speed, velocity and acceleration • Outline the conditions under which the equations for uniformly accelerated motion may be applied • Identify the acceleration of a body falling in a vacuum near the Earth's surface with the acceleration g of free fall • Solve problems involving equations of uniformly accelerated motion • Describe the effect of air resistance on falling objects • Draw graphs of distance-time, displacement-time, velocity-time, acceleration-time	Students will develop and apply skills to: • Collect measurements including uncertainties • Correctly calculate answers to the correct number of significant figures • Enhance data processing (moving towards DP expectations) • Study free fall and any type of motion using a video tracking software • Determine experimentally de value of the gravitational acceleration on the surface of the planet • Study experimentally Newton's laws • Investigate experimentally the changes of energy and rates of change of energy • Use spreadsheets to collect, present and analyse experimental data. • Solve past paper questions from IGCSE exams

• Calculate and interpret gradients and areas for graphs of motion • Determine relative velocity in one or two dimensions Mechanics • Calculate the weight of an object • Identify forces acting on an object and draw free-body diagrams representing the forces acting • Distinguish between scalars and vectors, and five examples of each • Determine the sum or difference of two vectors by a graphical method • Determine the resultant force in different situations • State Newton's first law of motion • Describe examples of Newton's first law • State the condition for translational equilibrium • Solve problems involving translational equilibrium • State Newton's second law of motion • Solve problems involving Newton's second law of motion • State Newton's third law of motion • Discuss examples of Newton's third law • Outline what is meant by work • Determine the work done by a non-constant force by interpreting force-displacement graphs • Solve problems involving the work done by a force • Outline what is meant by kinetic energy • Outline what is meant by change in gravitational potential energy • State the principle of conservation of energy • List different forms of energy and describe examples of transformation of energy from one form to another • Define power • Define and apply the concept of efficiency • Solve problems involving work, energy and power	

Topic 6- Atomic, Nuclear and Particle Physics

Students will be taught:

Knowledge	**Practical Skills & Processes:**
Students will apply scientific knowledge to: Radioactivity	Students will develop and apply skills to:

• Describe the structure of an atom in terms of the nuclear model • Describe the scattering of alpha particles by a thin metal gold foil to provide evidence for the nuclear model of the atom • Describe the composition of the nucleus in terms of protons and neutrons • State the charges of protons and neutrons • Use the term proton number Z • Use the term nucleon number A • Use the term nuclide and use the nuclide notation • Use and explain the term isotope • Balance equations involving nuclide notation • Demonstrate understanding of background radiation • Describe the detection of alpha particles, beta particles and gamma rays • Discuss the random nature of radioactive emission • Identify the radioactive emission by recalling their nature, their relative ionizing effects, their relative penetrating abilities • State the meaning of radioactive decay • State that during radioactive decay, the nucleus changes to that of a different element • Use the term half-life in simple calculations, which might involve information about tables or decay curves • Recall the effects of ionizing radiations on living things • Describe how radioactive materials are handled, used and stored in a safe way Nuclear Physics • Describe the terms nuclear fission and nuclear fusion • Define the term unified atomic mass • Apply the Einstein mass-energy equivalence • Define the concepts of mass defect, binding energy and binding energy per nucleon • Solve problems involving mass defect and binding energy • Describe the process of nuclear fission and nuclear fusion and solve problems	• Model radioactive decay with dice • Investigate applications of radioactive isotopes and their relation with one factor • Discuss the advantages and disadvantages of nuclear energy • Use spreadsheets to collect, present and analyse experimental data. • Solve past paper questions from IGCSE exams

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 10)

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 – Global Health and Development

- *Describe* examples of global health issues.
- *Describe* how the international community cooperates in addressing global health issues.
- *Describe* different measures of development to include GNP, HDI, birth and death rates, infant mortality, literacy rate, access to safe water and life expectancy.
- *Explain* the purpose of the Sustainable Development Goals and describe some of the limitations.
- *Describe* the differences between less economically developed countries (LEDCs)
- *Investigate* a global health issue.
- *Explain* how a scatter graph and Spearman's Ranking can show possible connections between different health and development indicators.

Unit 2 – Trade and Exchange

- *Describe* the major trading routes that had developed by the end of the nineteenth century.
- *Explain* different types of aid and exchanges that have developed from trade.
- *Explain* how interactions between states may lead to cooperation and cultural exchange.
- *Explain* how interactions between states may lead to exploitation and hostility.

Unit 3 – Civil Rights

- *Explain* the concept of civil rights and identify some important gains that have been made.
- *Describe* the nature and characteristics of discrimination in the United States from 1865-1965.
- *Describe* the methods by which segregation was challenged in the United States.
- *Explain* how non-violence was used to make positive gains in the Civil Rights movement.
- *Describe* the nature and characteristics of the apartheid state in South Africa.
- *Describe* the methods by which apartheid was challenged in South Africa.

Unit 4 – Situational Variables

- *Define* psychology and describe the "levels of analysis.
- *Describe* psychology as a scientific discipline.
- *Explain* the influence of social situations on behavior with reference to two relevant studies.

Unit 5 – Economics

- *Explain* that scarcity exists because factors of production are finite and wants are infinite.
- *Explain* that economics studies the ways in which resources are allocated to meet needs and wants.
- *Explain* the three basic economic questions of "What to produce?" "How to produce?" and "For whom to produce?"
- *Describe* the factors of production.
- *Describe* opportunity cost and explain its link to scarcity and choice.
- *Explain* and illustrate a basic model of an economy.
- *Compare* and *contrast* the advantages and disadvantages of planned and free market economies.
- *Explain* that economics is a social science.
- *Explain* the process of model building in economics.
- *Explain* that a production possibilities curve model may be used to show the concepts of scarcity, choice, and opportunity cost.

Unit 6 – MYP Capstone

- *Identify* some of the significant individuals that have been studied in the course.
- *Explain* how significant individuals have been a force for socio-economic change, political-ideological change, health and welfare, conflict within their society, and interstate conflict.
- *Discuss* how far individuals are more important in historical processes than impersonal factors.
- *Discuss* the extent to which "world-changing" events are shaped by significant individuals.

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:** Culture **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 10)

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 - Environment

- Students will be able to understand the significance of the sustainability of the environment.
- Students will be able to analyze this issue critically.
- Students will understand how societies can change the environment for a better world.

Text Type: article. news report

Unit 2 - Media Technology

- Students will learn vocabularies related to this unit and will make an oral presentation effectively.
- Students will be more familiar with the Power Point's presentation.
- Students will be aware of the importance of the media and modern technology and appreciate them more deeply.
- Students will understand the good and bad points of media and realize how the mass media influences our life.

Text Type: interview, presentation

Unit 3 - Social Issues

- Students will discuss a controversial issue in our society.
- Students will learn what a reasoned argument is.
- Students will recognize why they need factual data and evidence to support their argument clearly.
- Students will develop problem solving skills.
- Students will write formal "Letters to the Editor."

Text Type: formal letter, article

Unit 4 - Festival

- Students will learn the importance of festivals in the world and appreciate them.
- Students will investigate numerous types of festivals in the world.
- Students will learn that many festivals have religious origins; others involve seasonal change or have some cultural significance.
- Students will be aware of the importance of the festivals usually and ordinarily staged by a local community, which centers on some unique aspect of the community in Japan.

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)	

G１０　ユニット１：　意見文「言語と文化」

- 論理的な文章の構造を知る
- 科学的にものを考える方法を身につけよう
- 自然に対する目の向け方を変えよう
- 豊かになった現在の日本人が失ったものを考えよう
- 新しい分野への関心を持ち、視野を広げ、自分の意見を書こう
- 書いた意見文を発表して討論をおこなおう

G１０　ユニット２：　評論文「俳句の歴史」

- 近現代の俳句の特色を理解し、親しむ力を養おう。
- 切れ字・対比・季語などの技法を理解し、味わおう
- 作品を通して情操を豊かにしよう
- 俳句を作り出すにいたった作者の心を考えてみよう
- 気に入った作品を一つ選び、評論文を書いてみよう

G１０　ユニット３：　随筆「徒然草」

- 吉田兼好の人生観を理解する
- 当時の社会環境について理解する
- 当時の風俗習慣を理解する
- 現代とのちがいについて考える

G１０　ユニット４　：　文学「夢十夜」

- 身の回りの物事に興味を持ち、深く考える習慣を身につけよう
- 不条理な世界を体験してみる
- 与えられた状況設定の中で考えることになれる
- 日常性について考えなおしてみよう

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

Grade 10 (MYP Year 5)

	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 and understanding of the art form studied, including concepts, processes, and the use of subject-specific terminology.	Describing and analysing art forms using specific terminologies and language convey meaningful 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. • Use subject specific terminology when presenting and talking about their own work and others.
ii.	Demonstrate an understanding of the 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. Comparing and contrasting different works can help to identify connections.	• Explore and evaluate the artwork of artists in different time periods and cultures. • Critique the work of different time periods by using established comparing and contrasting methods.
iii.	Use acquired knowledge to purposefully inform artistic decisions in the process of creating 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. • Demonstrate the use of terminology to describe processes throughout the year in the process journal.

	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 the skills and techniques of the art form studied.	Frequent and 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.	Develop a feasible, clear, imaginative and coherent 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. • Develop a coherent solution by experimentation with media and evaluation in the process journal.
ii.	Demonstrate a range and depth of creative-thinking behaviours.	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 that is suitable for the selected art form studied.
iii.	Demonstrate the exploration of ideas to shape artistic intention through 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. • Demonstrate ongoing reflection and evaluation in their process journal.

	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.	Construct new meaning and transfer learning to new settings.	Identifying specific and relevant 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 individual and comparative tasks. • Compare and critique the work of selected different time periods and styles.
ii.	Create an artistic response that intends to reflect or impact on the world around them.	Artists and designers gain inspiration from everyday settings and the world around them to make a statement on a particular subject.	• 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. • Develop a personal response that intends to impact or reflect current topics in society.
iii.	Critique the artwork of self and others.	Evaluating and critically 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. • Critique and compare their own work to that of others, and formulate helpful solutions for critical feedback.

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.*	**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: Aesthetics **Related Concepts:** Interpretation//Expression **Global Context:** Personal and Cultural Expression	**Key Concept:** Communication **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 10

Criteria A	In order to:	Students will understand	Students will be able to
i.	Demonstrate knowledge and understanding of the art form studied, including concepts, processes, and the use of subject-specific terminology.	How to demonstrate knowledge and understanding of the main musical elements that create unique music genres.	Demonstrate knowledge and understanding of the main musical elements of film music (Unit 1). Identify different types of traditional music from around the world, and develop their musical knowledge and listening skills (Unit 2).
ii.	Demonstrate an understanding of the role of the art form in original or displaced contexts.	How to argue aesthetic properties found in musical compositions.	Describe and analyze common structural and expressive features of film music and music of the world (Unit 1-2).
iii.	Use acquired knowledge to purposefully inform artistic decisions in the process of creating artwork.	The various issues involved in obtaining a critical understanding of the issues and themes in the fields of "world music."	Communicate critical understanding of the issues and themes involved in working with "world music," through the act of presenting research papers related to film music and music of the world (Unit 1-2).

Criteria B	In order to:	Students will understand	Students will be able to
i.	Demonstrate the acquisition and development of the skills and techniques of the art form studied.	How to use a variety of subject matter and symbols to express ideas in a composition. How to identify and examine expressive and structural qualities in a piece of music and the reasons for their use.	Use a variety of compositional techniques to express ideas in a composition (Unit 1). Identify and examine required elements of musical expression, compositional techniques and reasons for their use (Unit 1-2).
ii.	Demonstrate the application of skills and techniques to create, perform, and/or present art.	How to interpret and apply musical features that have historically been associated with the success and exemplary status of historical musical works.	Analyze musical characteristics that cause various musical works to be considered exemplary (Unit 1). Classify musical examples through their sound, performance features, compositional structure, and relationship to societal, cultural, historical and personal contexts (Unit 1-2).

Criteria C	In order to:	Students will understand	Students will be able to
i.	Develop a feasible, clear, imaginative and coherent artistic intention.	How to use the Process Journal in order to document their working process, reflect critically on their own success and failures at different stages of their work.	Use their Process Journals to document their working process, reflect critically on their own success and failures at different stages of their work (Unit 1-2). Perform research- based tasks and hands-on based compositional and performing activities (Unit 1).
ii.	Demonstrate a range and depth of creative-thinking behaviors.	How to use creative feedback to inform their own artistic development and processes.	Evaluate their own work, using a variety of formats, including self-assessment and peer-evaluation (Unit 1).
iii.	Demonstrate the exploration of ideas to shape artistic intention through to a point of realization.	The value of experiencing a variety of assessment forms, including self-assessment and peer-evaluation, and the role	Use teacher's feedback and peer-evaluation to inform their own artistic development and processes (Unit 1).

		that this plays in the overall creative process.	Provide their peers with constructive criticism, and contribute to the creative process of their peers (Unit 1).

Criteria D	In order to:	Students will understand	Students will be able to
i.	Construct new meaning and transfer learning to new settings.	The definition and value of practicing ethical procedures when constructively criticizing the work of peers.	Define and put into practice collaborative skills while working in groups and performing or composing (Unit 1-2).
ii.	Create an artistic response that intends to reflect or impact on the world around them.	How to apply developed skills, techniques and processes to the act of composition and performance. How to respond appropriately to the constructive criticism of their peers. How to learn from others, while honing in on their own personal strengths.	Apply developed skills, techniques and processes to the performance of a piece of music (Unit 1). Demonstrate their ability to read music that contains advanced technical demands, expanded ranges and varied interpretive requirements (Unit 1). Apply their ensemble skills (e.g. balance, intonation, rhythmic unity) while performing as part of a group (Unit 1-2).
iii.	Critique the artwork of self and others.	How to differentiate between personal preference and informed judgment when discussing works of art.	Adapt to the critique of their artwork, and develop and refine their own artistic intentions based on this critique (Unit 1-2). Demonstrate their ability to create a better work of art, through the process of evaluation, reevaluation, and adaptation (Unit 1). Differentiate between their personal preference and informed judgment when discussing works of art (Unit 1-2).

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 10 - Prescribed Student Outcome		
	Unit 1	Unit 2
	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
Knowledge	• apply relationship and social skills to peer assessment and cooperative activities • apply relationship and social skills as they demonstrate defensive skills and strategies in order to effectively defend open spaces and properly field the ball. • demonstrate relationship and social skills while actively and safely participating in small and large groups • apply an understanding of basic components and skills required in striking and fielding activities • demonstrate an understanding of how movement skills, concepts and strategies are transferable, and identify skills, concepts and strategies that they found effective • learn different tournament formats • read and understand tournament brackets • use a variety of different badminton shots to set up for and defend against the attack. • actively participate and perform movement skills while demonstrating safe participation in different activities • apply skills and tactical solutions to a modified game of badminton • identity the advantages of the Festival Tournament Format.	
Skill	• send and receive the ball with control using the overhead and forearm pass • use an underhand or overhand serve to send l the ball over the net • use the overhead pass, forearm pass or spike to set up for an attack • apply relationship and social skills as they actively participate in small groups. • dribble, send (pass) and receive a ball while moving • demonstrate safe behaviours as they perform the phases of movement for striking a ball using a Cricket bat • coordinate the components of the serve including the toss, body rotation, and strike • serve a ball in the desired direction • initiate a rally with a serve and return • adjusting the swing to vary the distance and direction	
Attitudes	• demonstrate active participation during the activity • apply relationship and social skills while assessing and providing feedback to their peers • demonstrate responsibility for their own safety and the safety of others as they participate in a variety of activities	

	• actively participate in sustained moderate to vigorous physical activity while applying the basic principles of movement to send, receive and retain an object • participate actively and use critical and creative thinking skills to demonstrate an understanding of how to deal with emergency situations that may occur during physical activity • facilitate gameplay thru officiating • learn the value of practicing previously learned skills • learn to work responsibly in a self-directed station setting. • demonstrate behaviors that maximize their safety with the use of equipment