Ireland Curriculum Strands Alignment (I-O)

The presentations offered by The Educated Choices Program provide support for teaching and learning of the following standards:

Keeping well, looking good, feeling great, Junior Cycle (Ages 12-15)		Environment and Modern Agriculture	Healthful Eating
Junior Cycle Strand 1: Keeping well 1. How am I feeling?	1.1 identify and/or name parts of the body 1.2 recognise emotions in relation to personal experiences 1.3 use a range of texts to identify vocabulary related to physical 1.4 communicate with a familiar adult when feeling unwell or in need of help	✔	✔
2. People who help with my physical well being	1.5 identify medical professionals and list reasons for visiting them 1.6 identify instructors and therapists who also contribute to physical and mental wellbeing 1.7 link objects of reference, equipment, uniforms and sensory experiences with medical professionals, instructors, therapists and places 1.8		

3. What to expect when I get there	invite a medical professional and/or instructor and/or therapist into school 1.5 identify medical professionals and list reasons for visiting them 1.6 identify instructors and therapists who also contribute to physical and mental wellbeing 1.7 link objects of reference, equipment, uniforms and sensory experiences with medical professionals, instructors, therapists and places 1.8 invite a medical professional and/or instructor and/or therapist into school 1.9 practise preparing for a visit to a medical professional and/or instructor and/or therapist 1.10 identify appropriate behaviour when sitting in a waiting room 1.11 construct a timeline sequencing 'A visit to the...' 1.12 convey personal information using any form of expression[1] [1] Throughout the course 'forms of expression' includes oral, gesture, sign, written, visual, electronic and digital. 1.13 how recognition and understanding of social sight signs (pharmacy or toilets, logos, exit, push, pull etc.) found in the local environment		

Strand 2: Looking good 1. Personal care	2.1 participate in discussion about why taking care of their physical appearance is important and name a number of ways to care for their appearance 2.2 indicate personal care needs 2.3 use a variety of text to create a personal care plan 2.4 choose personal care products to be used and mark off tasks completed on personal care plan	✔	✔
2. Helping me look good	2.5 identify beauty/grooming service providers in the local community and list the different services they provide 2.6 recognise that money is needed to pay for these services and calculate how much money will be required for the different services using any form of text 2.7 participate in booking a real/imaginary appointment recording the appointment as preferred 2.8 acknowledge the passing of time when waiting 2.9 sequence a variety of texts to represent what to expect at their appointment		
3. Healthy eating and exercise	2.10 classify foods under healthy and unhealthy 2.11 explain why a balanced diet is necessary 2.12		

4. What to wear	carry out a survey of food eaten at lunchtime in their school and produce a pictogram of their findings 2.13 participate in creating a daily exercise programme and use a timer or participate in counting activities when completing exercises 2.14 outline simple ways to eat healthily and keep fit using any form of expression (poster, radio advert etc.) 2.15 participate in a healthy physical activity in the wider community 2.16 handle a variety of clothes and explore the different textures of clothes 2.17 sort clothes into different categories (colour, age, weather, purpose etc.) 2.18 recognise the types of clothes worn as they have grown, at different times of the year and for different occasions/purposes 2.19 distinguish between dirty and clean clothes and identify steps to clean and maintain them		
Strand 3: Feeling great 1. I'm great	3.1 identify their own features as being unique to them and recognise the similarities and differences between themselves and others 3.2 recognise and celebrate their achievements, abilities and skills as well as those of others 3.3 display their likes and interests using any form of expression	✔	✔

	3.4 reflect on the work created by their peers, recognising similarities and differences and respond appropriately		
2. My mental well being	3.5 identify what it means to have positive mental health 3.6 appreciate that making mistakes and learning from them is part of life 3.7 recognise the different types of challenges and stress they may experience in life 3.8 identify and practise a range of strategies and techniques for coping with life's challenges and stress 3.9 practise relaxation and mindfulness techniques		
3. Being social	3.10 Recognise public/private places and behaviours 3.11 Differentiate between familiar and unfamiliar people 3.12 greet people appropriately both in school and in the wider community 3.13 identify appropriate behaviour and etiquette when visiting amenities both in school and in the wider community		
4. Contributing to my community	3.14 identify and demonstrate care and respect for themselves, their community and environment		

	3.15 contribute to decision making within the class and/or group to decide on an aspect of their community they would like to contribute to 3.16 discuss what is needed to ensure the activity takes place and implement these decisions 3.17 gather photographic evidence to illustrate and reflect on their activity		

Mathematics, Junior Cycle (Ages 12-15)		**Environment and Modern Agriculture**	**Healthful Eating**
Junior Cycle Strand 1: Unifying 1. Building blocks	U.1 recall and demonstrate understanding of the fundamental concepts and procedures that underpin each strand U.2 apply the procedures associated with each strand accurately, effectively, and appropriately U.3 recognise that equality is a relationship in which two mathematical expressions have the same value	✔	✔
2. Representation	U.4 represent a mathematical situation in a variety of different ways, including: numerically, algebraically, graphically, physically, in words; and to interpret, analyse, and compare such representations		
3. Connections	U.5		

4. Problem solving 5. Generalisation and proof 6. Communication	make connections within and between strands. U.6 make connections between mathematics and the real world. U.7 make sense of a given problem, and if necessary mathematise a situation U.8 apply their knowledge and skills to solve a problem, including decomposing it into manageable parts and/or simplifying it using appropriate assumptions U.9 interpret their solution to a problem in terms of the original question. U.10 evaluate different possible solutions to a problem, including evaluating the reasonableness of the solutions, and exploring possible improvements and/or limitations of the solutions (if any) U.11 generate general mathematical statements or conjectures based on specific instances U.12 generate and evaluate mathematical arguments and proofs U.13 communicate mathematics effectively: justify their reasoning, interpret their results, explain their conclusions, and use the language and notation of mathematics to express mathematical ideas precisely		
Strand 2: Number strand 1. Representing numbers and arithmetic operations	N.1 investigate the representation of numbers and arithmetic operations so that they can:	✔	✔

2. Equivalent representations of rational numbers N.2	a) represent the operations of addition, subtraction, multiplication, and division in $\mathbb{N}$, $\mathbb{Z}$, and $\mathbb{Q}$ using models including the number line, decomposition, and accumulating groups of equal size b)perform the operations of addition, subtraction, multiplication, and division and understand the relationship between these operations and the properties: commutative, associative and distributive in N, Z, and Q (and in R \ Q, including operating on surds) c)explore numbers written as ab (in index form) so that they can: i. flexibly translate between whole numbers and index representation of numbers ii. use and apply generalisations such as ap aq = ap+q ; (ap)/(aq) = ap–q ; (ap)q = apq ; and n1/2 = √n, for a ∈ $\mathbb{Z}$, and p, q, p–q, √ n ∈ $\mathbb{N}$ and for a, b, √ n ∈ $\mathbb{R}$, and p q ∈ $\mathbb{Q}$ iii. use and apply generalisations such as a0 = 1 ; ap/q = q√ap = (q√a)p ; a–r= 1/(ar); (ab)r = ar br ; and (a/b)r = (ar)/(br), for a, b ∈ $\mathbb{R}$; p, q ∈ $\mathbb{Z}$; and r ∈ $\mathbb{Q}$ iv. generalise numerical relationships involving operations involving numbers written in index form v. correctly use the order of arithmetic and index operations including the use of brackets d) calculate and interpret factors (including the highest common factor), multiples (including the lowest common multiple), and prime numbers e) present numerical answers to the degree of accuracy specified, for example, correct to the nearest hundred, to two decimal places, or to three significant figures f) convert the number p in decimal form to the form a ×10n, where 1 ≤ a < 10, n ∈ $\mathbb{Z}$, p ∈ $\mathbb{Q}$, and p ≥ 1 (and 0 < p < 1)		

	investigate equivalent representations of rational numbers so that they can: a)flexibly convert between fractions, decimals, and percentages b) use and understand ratio and proportion c)solve money-related problems including those involving bills, VAT, profit or loss, % profit or loss (on the cost price), cost price, selling price, compound interest for not more than 3 years, income tax (standard rate only), net pay (including other deductions of specified amounts), value for money calculations and judgements, mark up (profit as a % of cost price), margin (profit as a % of selling price), compound interest, income tax and net pay (including other deductions)		
3. Situations involving proportionality	N.3investigate situations involving proportionality so that they can: a)use absolute and relative comparison where appropriate b) solve problems involving proportionality including those involving currency conversion and those involving average speed, distance, and time		
4. Analysing numerical patterns	N.4analyse numerical patterns in different ways, including making out tables and graphs, and continue such patterns		
5. Sets	N.5explore the concept of a set so that they can: a)understand the concept of a set as a well-defined collection of elements, and that set equality is a relationship where two sets have the same elements b)define sets by listing their elements, if finite (including in a 2-set or 3-set Venn diagram), or by generating rules that define them c)use and understand suitable set notation and terminology, including null set, ∅, subset, complement, element, ∈, universal set, cardinal number, #, intersection, ^, union, U, set difference, \ , ℕ, ℤ, ℚ, ℝ, and ℝ\ℚ d)perform the operations of intersection and union on 2 sets and on 3 sets, set difference, and complement, including the use of brackets to define the		

	order of operations e) investigate whether the set operations of intersection, union, and difference are commutative and/or associative		
Strand 3: Geometry and trigonometry strand 1. Units of measure and time 2 . 2D shapes and 3D solids 3. Geometrical proof	GT.1calculate, interpret, and apply units of measure and time GT.2investigate 2D shapes and 3D solids so that they can: a)draw and interpret scaled diagrams b)draw and interpret nets of rectangular solids, prisms (polygonal bases), cylinders c) find the perimeter and area of plane figures made from combinations of discs, triangles, and rectangles, including relevant operations involving pi d)find the volume of rectangular solids, cylinders, triangular-based prisms, spheres, and combinations of these, including relevant operations involving pi e) find the surface area and curved surface area (as appropriate) of rectangular solids, cylinders, triangular-based prisms, spheres, and combinations of these GT.3 investigate the concept of proof through their engagement with geometry so that they can: a)perform constructions 1 to 15 in Geometry for Post-Primary School Mathematics (constructions 3 and 7 at HL only) b)recall and use the concepts, axioms, theorems, corollaries and converses, specified in Geometry for Post-Primary School Mathematics (section 9 for OL and section 10 for HL) i.) axioms 1, 2, 3, 4 and 5 ii.) theorems 1, 2, 3, 4, 5, 6, 9, 10, 13, 14, 15 and 11, 12, 19, and appropriate converses, including relevant operations involving square roots	✔	✔

	iii.) corollaries 3, 4 and 1, 2, 5 and appropriate converses clipboard c) use and explain the terms: theorem, proof, axiom, corollary, converse, and implies d) create and evaluate proofs of geometrical propositions clipboard e)display understanding of the proofs of theorems 1, 2, 3, 4, 5, 6, 9, 10, 14, 15, and 13, 19; and of corollaries 3, 4, and 1, 2, 5 (full formal proofs are not examinable)		
4 . Trigonometric ratios	GT.4 evaluate and use trigonometric ratios (sin, cos, and tan, defined in terms of right-angled triangles) and their inverses, involving angles between 0° and 90° at integer values and in decimal form		
5. The co-ordinate plane	GT.5 investigate properties of points, lines and line segments in the co-ordinate plane so that they can: a)find and interpret: distance, midpoint, slope, point of intersection, and slopes of parallel and perpendicular lines b) draw graphs of line segments and interpret such graphs in context, including discussing the rate of change (slope) and the y intercept c)find and interpret the equation of a line in the form $y = mx + c$; $y – y1 = m(x – x1)$; and $ax + by + c = 0$ (for a, b, c, m, x1, y1 $\in \mathbb{Q}$); including finding the slope, the y intercept, and other points on the line		
6. Transformations	GT.6 investigate transformations of simple objects so that they can: a)recognise and draw the image of points and objects under translation, central symmetry, axial symmetry, and rotation		

	b) draw the axes of symmetry in shapes		
Strand 4: Algebra and functions 1. Patterns and relationships	AF.1 investigate patterns and relationships (linear, quadratic, doubling and tripling) in number, spatial patterns and real-world phenomena involving change so that they can: a)represent these patterns and relationships in tables and graphs clipboard b) generate a generalised expression for linear (and quadratic) patterns in words and algebraic expressions and fluently convert between each representation c) categorise patterns as linear, non-linear, quadratic, and exponential (doubling and tripling) using their defining characteristics as they appear in the different representations	✔	✔
2 . Algebraic expressions	AF.2 investigate situations in which letters stand for quantities that are variable so that they can: a)generate and interpret expressions in which letters stand for numbers b) find the value of expressions given the value of the variables c) use the concept of equality to generate and interpret equations		
3 . Operating on algebraic equation	AF.3 investigate situations in which letters stand for quantities that are variable so that they can: a)add, subtract and simplify i.linear expressions in one or more variables with coefficients in $\mathbb{Q}$ ii. quadratic expressions in one variable with coefficients in $\mathbb{Z}$ iii. expressions of the form a / (bx + c), where a, b, c $\in \mathbb{Z}$ b)multiply expressions of the form i. a (bx + cy + d); a (bx2 + cx + d); and ax (bx2 + cx + d), where a, b, c, d $\in \mathbb{Z}$		

4 . Solving algebraic equations 5 . Generating quadratic equations 6 . Changing the subject of a formula 7 . Functions	ii. (ax + b) (cx + d) and (ax + b) (cx2 + dx + e), where a, b, c, d, e ∈ ℤ c) divide quadratic and cubic expressions by linear expressions, where all coefficients are integers and there is no remainder d)flexibly convert between the factorised and expanded forms of algebraic expressions of the form: i.) axy, where a ∈ ℤ ii.) axy + byz, where a, b ∈ ℤ iii.) sx – ty + tx – sy, where s, t ∈ ℤ iv.) dx2 + bx; x2 + bx + c; (and ax2 + bx + c), where b, c, d ∈ ℤ and a ∈ ℕ v.) x2 – a2 (and a2 x2 – b2 y2), where a, b ∈ ℕ AF.4 select and use suitable strategies (graphic, numeric, algebraic, trial and improvement, working backwards) for finding solutions to: a)linear equations in one variable with coefficients in ℚ and solutions in ℤ or in ℚ b)quadratic equations in one variable with coefficients and solutions in ℤ or coefficients in ℚ and solutions in ℝ c)simultaneous linear equations in two variables with coefficients and solutions in ℤ or in ℚ d)linear inequalities in one variable of the form g(x) < k , and graph the solution sets on the number line for x ∈ ℕ, ℤ, and ℝ AF.5 generate quadratic equations given integer roots AF.6 apply the relationship between operations and an understanding of the order of operations including brackets and exponents to change the subject of a formula AF.7		

	investigate functions so that they can: a)demonstrate understanding of the concept of a function b) represent and interpret functions in different ways—graphically (for $x \in \mathbb{N}, \mathbb{Z}$, and $\mathbb{R}$, [continuous functions only], as appropriate), diagrammatically, in words, and algebraically—using the language and notation of functions (domain, range, co-domain, f(x) = , f :x ↦, and y =) (drawing the graph of a function given its algebraic expression is limited to linear and quadratic functions at OL) c)use graphical methods to find and interpret approximate solutions of equations such as f(x) = g(x) and approximate solution sets of inequalities such as f(x) < g(x) d) make connections between the shape of a graph and the story of a phenomenon, including identifying and interpreting maximum and minimum points		
Strand 5: Statistics and probability 1. Chance experiments 2. Random events	SP.1 investigate the outcomes of experiments so that they can: a)generate a sample space for an experiment in a systematic way, including tree diagrams for successive events and two-way tables for independent events b) use the fundamental principle of counting to solve authentic problems SP.2investigate random events so that they can: a)demonstrate understanding that probability is a measure on a scale of 0-1 of how likely an event (including an everyday event) is to occur b) use the principle that, in the case of equally likely outcomes, the probability of an event is given by the number of outcomes of interest divided by the total number of outcomes c) use relative frequency as an estimate of the probability of an event, given experimental data, and recognise that increasing the number of times an	✔	✔

3 . Statistical investigations	experiment is repeated generally leads to progressively better estimates of its theoretical probability SP.3carry out a statistical investigation which includes the ability to: a)generate a statistical question b) plan and implement a method to generate and/or source unbiased, representative data, and present this data in a frequency table c) classify data (categorical, numerical) d) select, draw and interpret appropriate graphical displays of univariate data, including pie charts, bar charts, line plots, histograms (equal intervals), ordered stem and leaf plots, and ordered back-to-back stem and leaf plots e) select, calculate and interpret appropriate summary statistics to describe aspects of univariate data. Central tendency: mean (including of a grouped frequency distribution), median, mode. Variability: range f) evaluate the effectiveness of different graphical displays in representing data g) discuss misconceptions and misuses of statistics h) discuss the assumptions and limitations of conclusions drawn from sample data or graphical/numerical summaries of data		

Modern Foreign Languages, Junior Cycle (Ages 12-15)	**Environment and Modern Agriculture**	**Healthful Eating**

Junior Cycle Strand 1: Communicative competence 1. Listening	1.1 identify the general topic of a conversation on familiar topics when it is expressed clearly 1.2 recognise frequently-used words and phrases related to areas of immediate relevance and experience, including the language of routine classroom interactions 1.3 identify specific information in texts related to familiar topics such as announcements, conversations, simple news items 1.4 source, select and share audio stimuli such as songs, conversations, advertisements through appropriate digital technologies	✔	✔
2. Reading	1.5 recognise the meaning of familiar words and phrases to include everyday signs and notices in public places 1.6 understand the general sense of a text on familiar topics 1.7 identify specific information in a range of texts dealing with familiar topics 1.8 source and use authentic texts to explore topics of relevance through a range of media Spoken production		
3. Spoken production	1.9 pronounce words accurately enough to be understood, with appropriate intonation 1.10 convey simple descriptions, presentations or announcements on familiar topics		

4. Spoken interaction	1.11 interact in routine exchanges with pronunciation and intonation which is clear enough to be understood and with appropriate non-verbal language 1.12 use simple polite forms in formal and informal situations such as greetings, thanks, introductions, and respond appropriately 1.13 ask and answer questions and exchange ideas, emotions and information on familiar topics in everyday situations 1.14 understand and use numbers as appropriate in everyday situations such as shopping, exchanging numbers, sequencing events 1.15 take part in routine classroom interactions such as pair and group work, asking questions, language games and activities, asking for help and repetition where necessary 1.16 communicate orally with others using digital technologies such as social media 1.17 write words and create short sentences using various media (emails, letters, blogs, postcards…) on everyday topics with accuracy 1.18 write a series of phrases and sentences linked with simple connectors such as but, and, or, as 1.19 create texts5 about aspects of their lives and topics that interest them such as family and friends, school, holidays, leisure activities, fashion, sport,		

5. Writing	celebrities 1.20 write short descriptions of present, past and future events, activities and personal experiences, as well as imaginative texts 1.21 fill out forms relevant to their age group and experience 1.22 produce and edit texts and interact with others in writing using appropriate digital technologies		
Strand 2: Language Awareness 1. Reflecting on how the target language works	2.1 recognise, describe and use language patterns such as word order, verbal system, nouns, adjectives, spelling and punctuation conventions 2.2 apply all language learning to creative activities such as producing simple poems, posters, presentations, games and drama 2.3 recognise how gender and social conventions influence target language usage	✔	✔
2. Comparing the target language with other languages they know	2.4 identify similarities and differences between the pronunciation, intonation and rhythm of the target language and that of other languages they know 2.5 compare grammar and vocabulary of the target language with that of other languages they know, making connections and distinctions as appropriate		
3. Reflecting on how they learn languages	2.6 identify, share and explain their preferred language-learning strategies 2.7 monitor and assess their own learning, using feedback they receive to reflect		

	on what they need to improve and to set goals for improvement		
Strand 3: Socio-cultural knowledge and cultural awareness 1. Learning about relevant facts, people, places and history about the country/countries related to the target language 2. Learning about traditions, customs and behaviours 3. Comparing their culture with that of the country/countries related to the target language	3.1 name and describe some features of the target language country/countries such as geographical features, weather, places and landmarks, food. 3.2 discover and use facts and figures related to the target country/countries such as statistical data, festivals, inventions, famous people 3.3 reflect on what they have learned about the country/countries associated with the target language 3.4 identify and explain some aspects of the target language country/countries in areas such as everyday living, interpersonal relations, customs and behaviours, social conventions 3.5 identify and reflect on common stereotypes about the target culture/s, including their own, and explain if and how their attitude towards the target country/countries is evolving 3.6 select, process and present information through the appropriate use of digital technologies, and evaluate it for truth and reliability 3.7 analyse similarities and differences in relation to their peers' lives in the target language country/countries in areas of daily life such as school, socialising, sport, eating habits 3.8 compare and contrast aspects of personal interest in the target language	✔	✔

	country/countries with those in their own country and present them using a range of media 3.9 appreciate how cultural differences influence social relations, such as in greetings and eating together 3.10 compare and contrast the use of numbers in the target language country/countries and in their own, with regard to familiar topics such as prices, age, dates, seasons		