


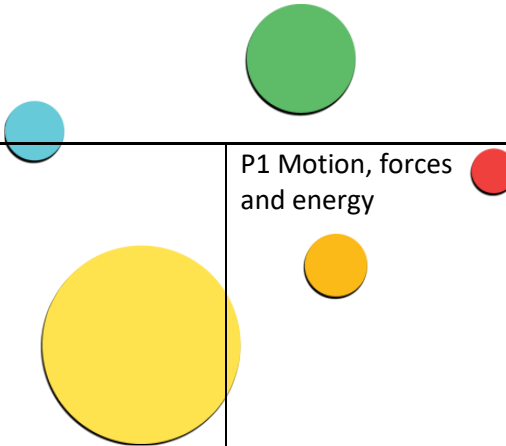
Straits International School Rawang
Curriculum Overview
Year 10 Autumn Term 1 2024/2025

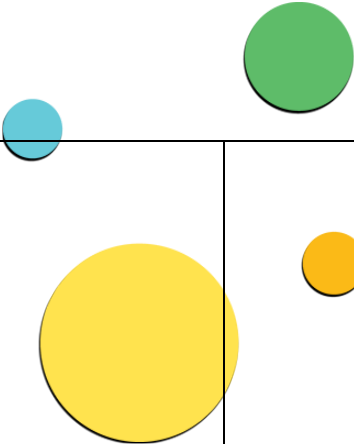

Autumn Term 1	What are we learning?	What KUS will we gain?	What will excellence look like?
Mathematics	Perimeter, area and volume, Introduction to probability, sequences, surds and sets	Students will gain a solid understanding of perimeter, area, and volume by learning to calculate these for both two-dimensional and three-dimensional shapes, along with mastering surface area and volume formulas. In probability, they will grasp basic principles, including creating and interpreting sample space diagrams, and calculating probabilities for independent and mutually exclusive events. Additionally, they will understand sequences, including arithmetic and geometric patterns, differentiate between rational and irrational numbers, manipulate surds, and work with set theory concepts, applying these skills to solve complex mathematical problems.	Excellence will be shown by a student who accurately calculates perimeter, area, and volume for various shapes and solves complex probability problems using sample space diagrams. They will confidently manipulate surds, identify patterns in sequences, and apply set theory with precision. Their understanding will be deep and well-reasoned, consistently demonstrating critical thinking and problem-solving skills across all topics.
How will this be assessed?		Quizzes, topical test, mental Maths, minor assessment	
Additional Mathematics	Functions, Simultaneous Equations and Quadratics Factors and Polynomials Equations, Inequalities and graphs	Mapping, definition of a function, composite and modulus functions and sketching and drawing graphs of functions and inverse functions. Solving simultaneous equations involving linear and non-linear, maximum and minimum values form quadratics functions. Roots of quadratics equations and quadratics inequalities. Polynomials involving polynomials, factor and remainder theorems, solving modulus inequalities algebraically and graphically.	Interpret equations with graphs when solving equations. To find the roots of complex cubic expressions and equations and solving more complex quadratics equations and inequalities.
How will this be assessed?		Minor and major assessment	

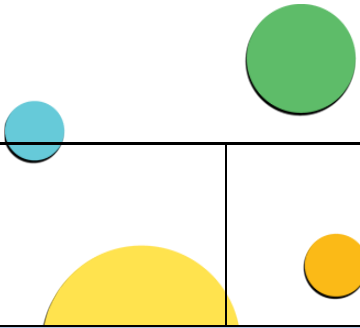
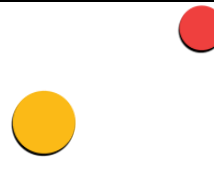


<p>First Language English</p>	<p>Unit 1: Traveller's Tales</p>	<p>Writing to inform, describe, entertain & persuade. Reading autobiography, advertisements, travel articles & poems. Demonstrating understanding of explicit meanings; Demonstrate understanding of implicit meanings and attitudes; Analysing, evaluating and developing facts, ideas and opinions, using appropriate support from the text; Demonstrating understanding of how writers achieve effects and influence readers; Selecting and using information for specific purposes; Articulating experience & expressing what is thought, felt and imagined; Organising and structuring ideas and opinions for deliberate effect; Using a range of vocabulary and sentence structures appropriate to context; Using register appropriate to context; Making accurate use of spelling, punctuation and grammar.</p>	<p>Excellence looks like being able to write a clear and concise summary, using skimming and scanning reading skills effectively to find information as quickly and efficiently as possible, and identifying how writers achieve certain effects confidently and articulately. Students will also be able to write a highly persuasive article.</p>
<p>Literature in English</p>	<p>Novel Study: Things Fall Apart</p>	<p>Show detailed knowledge of the content of literary texts, supported by reference to the text; Understand the meanings of literary texts and their contexts, and explore texts beyond surface meanings to show deeper awareness of ideas and attitudes; Recognise and appreciate ways in which writers use language, structure and form to create and shape meanings and effects; Communicate a sensitive and informed personal response to literary texts.</p>	<p>Excellence in this subject looks like the ability to perceptively explore writers' methods and their effects on the reader. Students will be able to construct a detailed, complex essay analysing the use of language and structure in a text and engaging with this on a personal level, being evaluative and sensitive in their understanding of the text and being able to identify nuanced meanings, linking with both the novel as a whole and its context.</p>
<p>English as a Second Language</p>	<p>Sports and free time</p>	<p>Understand and use a range of vocabulary related to the topic of sport and leisure activities; use verbs followed by the -ing form and to + infinitive; communicate ideas effectively in speech by making suggestions and expressing preferences; understand the difference between skimming and scanning; identify and select information from a</p>	<p>Speak to make suggestions and express preferences politely; read an article and skim for details; read about Rubik's speed cubing and scan for information; create a display on leisure activities; read about markets in Cambridge and skim for key points.</p>




		personal blog and an online article about sports and pastimes.	
How will this be assessed?		FLE: Partial Language Paper 1 – a full Question 1 with comprehension and summary tasks. Lit: Essay question on an extract from the novel. ESL: Teacher/self-assessment, presentation, speaking tasks, projects, group work	
English as an Additional Language (EAL)	Family and home	Engage in a variety of activities to enhance their language skills, starting with describing people using coordinating and subordinating conjunctions : focus on naming and describing family members using appropriate pronouns ; writing about a family occasion with descriptive words and adjectives ; listen, speak, read, and write about friends and the concept of friendship, using superlative and comparative adjectives to describe people and relationships ; practice describing their house and daily activities using gerunds. Learn noun phrases, adverbs of frequency, prepositions of place, and the correct use of definite and indefinite articles. Throughout these activities, students will also develop important skills such as expanding their vocabulary, practicing spoken English, collaborating with peers, and reading to find specific information.	Write about family occasions, incorporating descriptive words and adjectives to add detail and emotion. Use superlative and comparative adjectives to describe friends and relationships, showing understanding of how to compare. Describe their house and surroundings with precise vocabulary. Apply adverbs of frequency to discuss routines, demonstrating their ability to talk about how often activities occur. Use a broader range of vocabulary to express themselves in writing and speaking. Engage in conversations with peers, showing improvement in spoken English and collaborative communication. Read texts with the ability to find and understand specific information, contributing to better comprehension skills. Write coherent and detailed descriptions of people, places, and activities, demonstrating correct grammar and varied sentence structures.
How will this be assessed?		Topical quiz, speaking activity, assessment, listening, writing activity.	
Combined Science	B3 Movement into and out of cells B4 Biological molecules	In Unit 3 and 4 of Biology, students will learn to describe active transport, explain the importance of active transport, list the chemical elements that make up carbohydrates, fats and proteins, state that large molecules are made from smaller	Students will be able to: 1. Define active transport as the movement of particles through a cell membrane from a region of lower

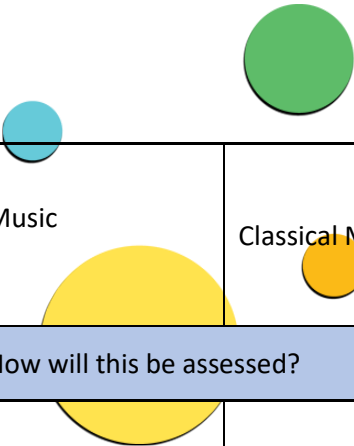
	<p>P1 Motion, forces and energy</p>	<p>molecules, and understand the food tests. In Unit 1 of Physics, students will explore on methods to find a length or a volume, determine an average value for a small distance and for a short interval of time, define speed, sketch, plot and interpret distance–time and speed–time graphs, determine, qualitatively, from the shape of a speed–time graph when how an object is moving, calculate speed from the gradient of a straight-line section of a distance–time graph, define acceleration, Calculate the area under a speed–time graph to work out the distance, know that the acceleration of free fall g, Define gravitational field strength g, define density as mass per unit volume and know that forces may produce changes in the size, shape and motion of an object.</p>	<p>concentration to a region of higher concentration, using energy from respiration</p> <ol style="list-style-type: none"> 2. Explain how active transport is important in uptake of ions by root hair cell 3. List carbon, oxygen and hydrogen makes up carbohydrates, lipid and protein 4. Plan experiment to identify the biological molecule present in a sample using different food tests 5. Measure volume of regular and irregular shaped objects 6. Calculate speed and distance from a distance-time graph 7. Calculate acceleration and distance from speed-time graph 8. Calculate weight using the formula; $W=mg$
<p>How will this be assessed?</p>		<p>Quiz, group work and minor assessment</p>	
<p>Physics</p>	<p>P1 Motion, forces and energy</p>	<p>Students will learn physical quantities and measurement techniques, vector, motion, speed-time graph, distance-time graph, speed, acceleration, mass and weight, density, forces, effects of forces, Hooke’s law, centripetal force, turning effect of forces, centre of gravity, momentum, principle of conservation of momentum, principle of moment, kinetic energy, gravitational energy and elastic potential energy</p>	<p>Students will be able to:</p> <ol style="list-style-type: none"> 1. Describe the use of rulers and measuring cylinders 2. Describe how to measure a variety of time intervals using clocks and digital timers 3. Determine an average value for a small distance and for a short interval of time by measuring multiples 4. Understand that a scalar quantity and vector quantity 5. Determine, by calculation or graphically, the resultant of two vectors at right angles 6. Define speed as distance travelled per unit time 7. Interpret speed and distance time graph 8. Calculate speed and acceleration 9. Use Hooke’s law to find spring constant, force or extension 10. Define gravitational field strength as force per unit mass

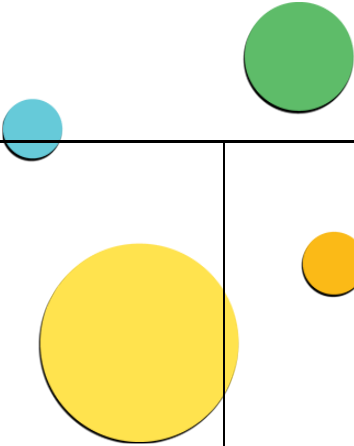

			<ol style="list-style-type: none"> 11. Define density as mass per unit volume 12. Define the spring constant as force per unit extension; recall and use the equation $k = F/x$ 13. Define the moment of a force as <i>moment = force × perpendicular distance from the pivot</i>; recall and use this equation 14. Plan an experiment to determine the position of the centre of gravity of an irregularly shaped plane lamina 15. Define momentum as <i>mass × velocity</i> 16. Use the equation for kinetic energy $E_k = 1/2mv^2$ 17. Use the equation for the change in gravitational potential energy $\Delta E_p = mg\Delta h$
How will this be assessed?		Quiz, group work and minor assessment	
Humanities - History	The Treaty of Versailles and The League of Nations	Students learn about the key terms of the Treaty, such as reparations and territorial changes, and how these influenced global politics. The League of Nations' efforts to maintain peace and prevent future conflicts are also explored, giving students insight into the successes and limitations of early attempts at international cooperation	To achieve excellence in this area, students need to demonstrate their knowledge by clearly recalling and organizing information about the Treaty and the League (AO1). They should also be able to explain why events happened the way they did, considering causes, effects, and the perspectives of those involved (AO2). Finally, students must skilfully analyse and interpret various historical sources to understand their context and relevance (AO3). This combination of skills helps students build a comprehensive and nuanced understanding of this critical period in history.
How will this be assessed?		Past Paper 1 Structured GCSE Questions and Paper 2 source analysis questions. Minor Assessment Window.	
ICT	<u>Hardware & Software, Database, File management</u>	<p>Knowledge: The basic principles of software and hardware, the functions of operating systems, the structure of databases, and file management techniques.</p> <p>Understanding: How different components and technologies work together within a computer system, and the impact of emerging technologies.</p>	<p>Demonstrated ability to effectively use and differentiate between various software applications and hardware components.</p> <p>Ability to design, manage, and query databases effectively, including using forms, extracting summary data, and producing detailed reports</p>

		Skills: Designing and managing databases, creating effective forms, producing reports, sorting and searching data, and optimizing file sizes and images.	Effective use of file naming conventions, reduction of file sizes, and optimization of image files for various needs.
How will this be assessed?		Quiz to assess the database technical terms Produce report for a database structure Minor Assessment	
Malay Language	Alam Semula Jadi	Students will acquire knowledge of key vocabulary related to natural environments, including flora, fauna, and ecosystems. They will develop skills to describe, discuss, and analyse natural elements and environmental issues in both written and spoken Malay, using Kata Penguat (intensifiers) correctly to enhance their descriptions. Additionally, students will gain an understanding of the importance of preserving natural environments and the impact of human activities on ecosystems.	<ul style="list-style-type: none"> • Accurate and varied use of vocabulary related to natural environments, including flora, fauna, and ecosystems. • Correct application of Kata Penguat (intensifiers) to enhance descriptions and discussions. • Ability to write a descriptive essay about a picnic experience, incorporating vivid imagery and relevant vocabulary. • Active participation in discussions, showing deep engagement with the topic and a thoughtful approach to environmental conservation.
How will this be assessed?		Vocabulary test, essay, written and spoken assignments.	
Mandarin	Foreign Language: Everyday Activity 第二语言：学校和教育、未来教育与计划 第一语言：文化认同	Foreign Language: In this unit, students will learn the following topics: Greetings and Introductions, Family and Pets, Everyday Life, Hobbies, Eating and Drinking. Students will be able to master vocabulary, grammar, and writing styles to meet the basic practice requirements. 第二语言：在此单元中，学生通过文章明白以及掌握国际与国立学校的区别；应试与素质教育的区别；升学所面对抉择与空档年是否重要。 第一语言：在本单元中，学生通过阅读文章了解文化认同的概念，探讨与文化入侵有关的课题。	Foreign Language: Through the following topics, students will be able to better express their daily activities in writing by utilizing the vocabulary, grammar, and content they have learned. Additionally, they will be able to use the vocabulary and grammar they have studied in their daily lives to communicate effectively with others and express their ideas. 第二语言：通过阅读文章，学生能够充分理解自己的校园生活同时也能够掌握各学校的教育体系；掌握关于升学、空档年等话题，在写作与口语方面能够有条理地表达自己的想法。

			<p>第一语言：学生在理解了文化认同概念后能够对相关课题进行讨论，有条理地发表自己的想法，并以正确的写作手法书写出自己对课题的看法。</p>
How will this be assessed?		Group discussion, homework and assessment.	
Art & Design	Introduction to IGCSE & Prep 1	<p>In this unit, students will gain knowledge of the structure and expectations of the IGCSE Art and Design exam, including understanding its various assessment components, such as coursework and final projects. They will learn how to research and develop initial ideas into refined outcomes, recognizing the importance of planning, creativity, and exploration in the artistic process. Students will also understand the significance of personal expression and individual themes in their work, as well as how to critically assess materials, techniques, and approaches to select the most effective ones for their projects. Skills developed will include research techniques for inspiring ideas, sketching and planning for creative development, experimenting with various materials and media, and reflecting on and refining their work through a structured process. This comprehensive approach will prepare students for both the IGCSE exam and future creative endeavours.</p>	<p>Excellence will be shown by a clear understanding of the IGCSE exam requirements, with students confidently demonstrating their ability to take an initial idea and develop it into a refined final outcome. This includes evidence of research, thoughtful material selection, and creative exploration. Students will produce high-quality, personalized work that reflects both technical skill and originality. Their projects will show a deep connection to personal interests and an effective use of materials to convey their concepts.</p>
How will this be assessed?		<ul style="list-style-type: none"> ● Formative Assessment: ● Regular sketchbook checks to track the development of ideas, research, and exploration. ● Feedback on experimentation with materials and initial designs. ● Summative Assessment: ● Assessment of the final outcome based on creativity, technical skill, and originality. ● Evaluation of the development process, from initial research to final presentation. ● Judgement of how well students meet the IGCSE criteria, including use of media, composition, and personal response. 	

 <p>Humanities – Travel & Tourism</p>	 <p>Unit 1 – Key Concepts & Definitions</p>	 <p>Identifying and describing the main types of tourism; Explaining the main reasons why people travel and analysing the importance of the different reasons; Understanding and explaining the importance of sustainability in travel and tourism; Identifying the different characteristics of travel and tourism, explaining how they are related and analysing the associated difficulties; Identifying and describing the different types of tourists; Identifying and describing the different types of destinations.</p>	<p>Excellence looks like being able to remember and understand all of the key definitions and concepts that we study in this unit. Students will be able to approach simple exam-style questions with confidence, identifying and explaining relevant details and applying their knowledge to a variety of case studies.</p>
<p>Humanities – Global Perspectives</p>	<p>Introduction to the course</p>	<p>Developing independence and feeling empowered to take their place in an ever changing, information heavy and interconnected world; Having an analytical, evaluative grasp of global issues and their causes, effects and possible solutions; Inquiring into and reflecting on issues independently and in collaboration with others from a variety of different cultures, communities and countries; Can communicate sensitively with people from a variety of backgrounds; Working independently as well as part of a team, directing much of their own learning with the teacher as facilitator; Considering important issues from personal, local, national and global perspectives and understanding the links between them; Critically assessing the information available to them and making judgements; Can support judgements with lines of reasoning; Having a sense of their own active place in the world; Can empathise with the needs and rights of others.</p>	<p>Excellence looks like being able to explore a variety of global issues from multiple perspectives, as well as their own, confidently and articulately. Students will be able to approach a variety of topics in exam-style questions, as well as build their knowledge in order to begin developing sophisticated coursework ideas. Students will work flawlessly in a team.</p>
<p>How will this be assessed?</p>		<p>Travel & Tourism: Some simple exam-style questions. Global Perspectives: Some simple exam-style questions.</p>	

 <p>Music</p>	<p>Classical Music</p>	<p>In this unit, students acquired and consolidated a range of basic musical skills, knowledge, and understanding through the activities of listening, performing, and composing.</p>	<p>Students will excel in listening to and analyzing various musical styles using technical language, organizing and structuring material to convey their intentions, and describing key events and figures that will influence the development of music across different times and cultures.</p>
<p>How will this be assessed?</p>		<p>Aural test and analysis of pieces.</p>	
<p>PE</p>	<p>Individual sports: Athletics Team sports: Dodgeball Healthy Living- fun games</p>	<p>Athletics:</p> <p>Students will gain knowledge and practical experience in various athletic disciplines, including running, jumping, and throwing events. They will learn the fundamentals of each event, focusing on proper technique, form, and the importance of physical conditioning. Through these activities, students will improve their speed, strength, endurance, and coordination, which are essential for overall athletic performance.</p> <p>Dodgeball</p> <p>Students will develop key skills in throwing with accuracy and power, catching and blocking to defend against incoming balls, and dodging to avoid being hit. They will also enhance their decision-making abilities, learning when to attack, defend, or dodge based on the flow of the game. Through these activities, students will improve their hand-eye coordination, agility, strategic thinking, and teamwork.</p>	<p>Athletics:</p> <ul style="list-style-type: none"> • Running: Demonstrating exceptional speed, endurance, and efficient technique, with strong starts, smooth transitions, and powerful finishes. • Jumping: Mastery of techniques, showing strong take-off power, good body control in the air, and precise landings. • Throwing: Displaying superior strength and technique in events like shot put, discus, or javelin, with consistently long and accurate throws. <p>Dodgeball:</p> <ul style="list-style-type: none"> • Throwing: Demonstrating powerful, accurate throws that consistently target opponents, with the ability to vary speed and angles to outmaneuver defenses. • Catching/Blocking: Showing quick reflexes and strong hands, catching or blocking incoming balls with confidence and composure, even under pressure. • Dodging: Exhibiting exceptional agility and quickness, effectively dodging incoming throws with precise timing and minimal movement. • Decision-Making: Displaying sharp strategic thinking, making smart decisions on when to throw, dodge, or

			<p>block, and anticipating opponents' moves to gain a tactical advantage.</p> <p>Healthy Living</p> <ul style="list-style-type: none"> • Teamwork: Proactive collaboration, effective support, and positive team dynamics. • Communication: Clear, precise, and effective verbal and non-verbal communication. • Decision-Making: Quick, strategic choices with strong situational awareness. • Body Movement/Spatial Awareness: Efficient, coordinated movement with keen spatial awareness. • Behavior: Consistent respect, responsibility, and positive influence on others.
<p>How will this be assessed?</p>		<p>Athletics- students will be assessed on running, jumping and throwing events Dodgeball- throwing, catching/blocking, dodging, decision making Healthy Living: teamwork, communication, decision making, body movement/spatial awareness</p>	