



Ecole Internationale Provence-Alpes-Côte d'Azur



Forward Planning Long-Term Semester Planning

Academic Year: 2020-2021

Class: S5

Subject: Mathematics 6 periods

Teacher: Ms Rebeca Morones

No. Students: 19

Curriculum – Long-Term Planning 2020-2021

Date	Learning Objectives	Activities	Resources	Key Competences	Learning Outcomes / Assessment
September (2 weeks)	Revision	<ul style="list-style-type: none"> - Vocabulary - Number properties revisions. - Number sets 	<ul style="list-style-type: none"> - Bingo game - Taboo game 	1, 2, 5, 7	- Getting back into school mode.
September - October (3 weeks)	Set theory Revision	<ul style="list-style-type: none"> - Definition of sets - Union ($A \cup B$), intersection ($A \cap B$), complement (\bar{A}). 	<ul style="list-style-type: none"> - Bingo game - Mini whiteboards 	1, 2, 3, 5, 6	<ul style="list-style-type: none"> - Homework - Classwork
	Probability Revision	<ul style="list-style-type: none"> - Definition of events, univers (Ω). - Probability theory (Theoretical probabilities, relative frequencies) - Representing combined probabilities with diagrams. - Laws of probabilities. - Conditional probability. - Independent events. 	<ul style="list-style-type: none"> - Bingo game - Mini whiteboards 		
October (2 weeks)	Algebra	<ul style="list-style-type: none"> - Index laws revision. - Rational indices revision. - Convert between scientific notation and standard form. 	<ul style="list-style-type: none"> - Tarsia puzzles - Bingo game - Mini whiteboards 	1, 2, 3, 5, 6	<ul style="list-style-type: none"> - Homework - Classwork - Test

November (2 weeks)	Algebra	<ul style="list-style-type: none"> - Solving exponential equations. - Logarithms properties. - Solving equations with logarithms. 	<ul style="list-style-type: none"> - Worksheets. - Geogebra. 	1, 2, 3, 4, 5, 6	
November – December (3 weeks)	Geometry	<ul style="list-style-type: none"> - Revision trigonometric ratios. - Trigonometric properties in non-right triangles. - Area using the sine rule. - Applied questions. 	<ul style="list-style-type: none"> - Worksheets. 	1, 2, 3, 4, 5, 6, 7, 8	<ul style="list-style-type: none"> - Classwork - Homework
January (3 weeks)	Vectors	<ul style="list-style-type: none"> - Definiton of linearly dependent and independent vectors. - Orthonorml basis. - Scalar product of two vectors. - Magnitude of a vector. - Orthogonality of vectors. - Poperties of parallel and perpendicular vectors. Determine: - Distance between two points. 	<ul style="list-style-type: none"> - Worksheets - Geogebra 	1, 2, 3, 4, 5, 6, 7	<ul style="list-style-type: none"> - Homework - Classwork - Test
January - February (2 weeks)	Algebra Quadratic equations	<ul style="list-style-type: none"> - Revision factorising quadratic equations. - Solving by quadratic formula. - Solving by completing the square. - Analysing the 	<ul style="list-style-type: none"> - Geogebra. - Worksheets. - Tarsia puzzle. 	1, 2, 3, 4, 5, 6, 7, 8	<ul style="list-style-type: none"> - Homework - Classwork

		discriminant. - Modelling. - Analysing quadratic functions.			
February (2 weeks)	Periodic relationships: Trigonometric functions	- Radian/degrees measurements. - Trigonometric ratios in the unit circle. - Trigonometric identities and equations.	- Worksheets. - Geogebra. - Bingo game.	1, 2, 3, 4, 5, 6	Homework/Classwork Test
March (2 weeks)	Modelling	- Exponential functions. - Periodic models. - Applied functions.	- Geogebra - Worksheets	1, 2, 3, 4, 5, 6, 7, 8	HomeworkClasswork Test
March - April (3 weeks)	Statistics: Data analysis	- Introduction to Σ notation. - Calculating Variance and standard deviation. - Comparing distributions given their variance and standard deviation. - Linear transformations of data. - Linear transformations and measures of central tendency.	- Worksheet. - Bingo game	1, 2, 3, 4, 5, 6	Homework/Classwork Test
April – May (2 weeks)	Sampling and statistical inference	- Difference between population and samples. - Random sampling technics.	- Worksheets - Geogebra	1, 2, 3, 4, 5, 6, 7, 8	Homework/Classwork
May – June (3 weeks)	Geometry	- Finding lengths and distances in 3D objects. - Applying Pythagoras to	- Worksheets - Geogebra	1, 2, 3, 4, 5, 6	Homework/Classwork Test



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		3D shapes.			
June	Revision				

* Link to 8 key competences:

1. Literacy (reading and writing)
2. Multilingualism
3. Mathematics, Science, Technology and Engineering
4. Digital
5. Personal, Social and Learning to Learn
6. Citizenship
7. Entrepreneurship
8. Cultural Awareness and Expression