

Ecole Internationale Provence-Alpes-Côte d'Azur



Forward Planning

Long-Term Semester Planning

Academic Year: 2020-2021

Class: S6 Subject: Mathematics 3 Periods Teacher: Ms Rebeca Morones No. Students: 11







Curriculum – Long-Term Planning 2020-2021

Date	Learning Objectives	Activities	Resources	Key Competences	Learning Outcomes / Assessment
September (2 weeks)	Revision	- Types of numbers.	- Tarsia puzzles	1, 2, 3, 5, 6, 7	Back to school mode.Work load, language skills.
September – October (3 weeks)	Sequences	 Definition of arithmetic and geometric sequences. Sequences in graphic form. Recurrence/induction. Sums of consecutive terms. Applied questions 	- Worksheets. - Geogebra.	1, 2, 3, 4, 5, 6, 7, 8	-
October - November (2 weeks)	Statistics	 Revision (percentages, frequencies). Contingency tables (relative frequency). Applied questions. 	- Worksheets	1, 2, 3, 4, 5, 6, 7, 8	
November - December (4 weeks)	Functions I	 Define classic (straight lines, quadratics) functions by finding domain and range, x and y intercepts, graphs. Solving simultaneous equations graphically. Transformations and symmetry. 	- Worksheets. - Geogebra.	1, 2, 3, 4, 5, 6, 7, 8	
January (4 weeks)	Probability	 Revision (definition events, finding simple probabilities, sets). Probabilities from contignecy tables. 	- Worksheets. - Geogebra.	1, 2, 3, 4, 5, 6, 7, 8	

Ecole Internationale Provence-Alpes-Côte d'Azur





		 Probability trees. Probabilities formulae. Counting (permutations and combinations). Conditional probabilities. 			
February - March (4 weeks)	Functions II	 Define classic (rational and trigonometric) functions by finding domain and range, x and y intercepts, graphs. Solving simultaneous equations graphically. Transformation and symmetry. 	- Worksheets - Geogebra.	1, 2, 3, 4, 5, 6, 7, 8	
March (3 weeks)	Periodic functions	- Definition - Graphs. - Modelling functions.	- Worksheets. - Geogebra.	1, 2, 3, 4, 5, 6, 7, 8	
April (3 weeks)	Probability Random Variables	Bernoulli trials.Binomial distribution.Applied questions.		1, 2, 3, 4, 5, 6, 7, 8	
May – June (4 weeks)	Functions analysis	 Differentiation. Use of derivatives to describe graphs. Finding tangents to graphs. 	- Worksheets. - Geogebra.	1, 2, 3, 4, 5, 6, 7, 8	
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

Ecole Internationale Provence-Alpes-Côte d'Azur





- 7. Entrepreneurship
 8. Cultural Awareness and Expression