



Ecole Internationale Provence-Alpes-Côte d'Azur



Forward Planning

Long-Term Semester Planning

Academic Year: 2020-2021

Class: S4

Subject: Mathematics 6 Periods

Teacher: Ms Rebeca Morones

No. Students: 28

Curriculum – Long-Term Planning 2019-2020

Date	Learning Objectives	Activities	Resources	Key Competences	Learning Outcomes / Assessment
September (2 weeks)	Revision	<ul style="list-style-type: none"> - BODMAS - Prime numbers, square numbers, cube numbers. - HCF and LCM. - Fractions, decimals and percentages. 	<ul style="list-style-type: none"> - Worksheets. - Bingo games. 	1, 2, 3, 4, 5, 6, 7, 8	<ul style="list-style-type: none"> - Classwork - Homework - Test
September – October (3 weeks)	Sets	<ul style="list-style-type: none"> - Properties of rational numbers/real numbers. - Writing recurrent decimal numbers as fractions. - Surds - Properties of radicals - Rationalising a denominator 	<ul style="list-style-type: none"> - Worksheets 	1, 2, 3, 4, 5, 6, 7, 8	<ul style="list-style-type: none"> - Classwork - Homework
November (2 weeks)	Proportionality	<ul style="list-style-type: none"> - Direct proportion: definition and graphs. - Inverse proportions: definition and graphs. - Applied questions. 	<ul style="list-style-type: none"> - Worksheets - Geogebra 	1, 2, 3, 4, 5, 6, 7, 8	<ul style="list-style-type: none"> - Classwork - Homework - Test
November – December	Linear models	<ul style="list-style-type: none"> - Introduction to functions/ relations 	<ul style="list-style-type: none"> - Worksheets. - Geogebra 	1, 2, 3, 4, 5, 6, 7, 8	<ul style="list-style-type: none"> - Classwork - Homework

(4 weeks)		<ul style="list-style-type: none"> - Differences between them. - Linear models (different equations) - Find intercepts. - Solving simultaneous equations graphically and algebraically. - Gradient and intercept formula and general form. - Parallel lines. - Perpendicular lines. 			- Test
January (2 weeks)	Geometry	<ul style="list-style-type: none"> - Pythagoras theorem and its converse - Trigonometric ratios - Properties of right angled triangles. 	- Worksheets	1, 2, 3, 5, 6, 7, 8	<ul style="list-style-type: none"> - Classwork - Homework - Test
January – February (3 weeks)	Statistics	<ul style="list-style-type: none"> - Types of data. - Data collection - Data interpretation 		1, 2, 3, 4, 5, 6, 7, 8	<ul style="list-style-type: none"> - Classwork - Homework
		<ul style="list-style-type: none"> - Data representation - Stem and leaf diagrams - Pie Charts/ Bar charts/ cumulative frequency/ histograms/ boxplot/ - Density histograms 			<ul style="list-style-type: none"> - Classwork - Homework - Group Project

March (2 weeks)	Polynomial expressions	<ul style="list-style-type: none"> - Revision on algebra. - Polynomial order - Adding subtracting polynomials. - Quadratic expressions - Factorisation of quadratics. - Solving quadratics. - Pascal's triangle. - Power functions. 	<ul style="list-style-type: none"> - Worksheets. - Geogebra. 	1, 2, 3, 4, 5, 6, 8	<ul style="list-style-type: none"> - Classwork - Homework - Test
March – April (2 weeks)	Geometry	<ul style="list-style-type: none"> - Enlargements. - Similarity properties for angles, lengths, areas and volumes. - Congruent and similar triangles. - Intercept theorem 	<ul style="list-style-type: none"> - Worksheets - Geogebra 	1, 2, 3, 4, 5, 6, 8	<ul style="list-style-type: none"> - Classwork - Homework - Test
April (2 weeks)	Probability	<ul style="list-style-type: none"> - Sample space/ event. - Venn diagram/ tree diagram. - Finding simple probabilities. - Probabilities properties (independent events, mutually exclusive, exhaustive events, complementary). 	<ul style="list-style-type: none"> - Worksheets 	1, 2, 3, 5, 6, 8	<ul style="list-style-type: none"> - Classwork - Homework - Test

May (3 weeks)	Vectors	- Numbers and points on planes (position vectors) - Numbers and transformations on planes (free vectors) - Operators in a plane	- Worksheets - Geogebra	1, 2, 3, 5, 6, 8	- Classwork - Homework - Test
May - June (3 weeks)	Geometry	- Circle properties - Sectors/ arc/chord. - Length of arcs, sector, area circle. - Relative position of a straight line and a circle. - Right-angled triangles inscribed in a circle.	- Worksheets - Geogebra	1, 2, 3, 4, 5, 8	- Classwork - Homework
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