



Ecole Internationale Provence-Alpes-Côte d'Azur



## **Forward Planning**

### **Long-Term Semester Planning**

**Academic Year: 2020-2021**

**Class: S4**

**Subject: Mathematics 6Periods**

**Teacher: Ms Rebeca Morones**

**No. Students: 1**

## Curriculum – Long-Term Planning 2020-2021

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

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

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

\* Link to 8 key competences:

1. Literacy (reading and writing)



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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