

Forward Planning

Long-Term Semester Planning

Academic Year: 2022-2023

Class: S4
Subject: Mathematics 4P&6P
Teacher: Mme Bonhomme
No. Students: 26

Curriculum – Long-Term Planning 2022-2023

Date	Learning Objectives	Activities	Resources	Key Competences*	Learning Outcomes / Assessment
1.5 weeks	Basic calculations	Basic rules for calculating with rational numbers (BIDMAS, fractions, positive and negative numbers) Prime number factorisation Terminating and recurring decimals (6P)	Worksheets Puzzles / games	1,2,3,4,8	Graded homework, tests (formative and sommative)
1 week	Algebra	Recap of collecting like terms, expanding single or double brackets, factorising single brackets...	Worksheets	1,2,3,4,7	
2 weeks	Right-angled triangles	RATs in circles (6P), Pythagoras' theorem	Worksheets Geogebra	1,2,3,4,5,7,8	
1 week	Powers & algebraic expressions	Standard form, index laws, simplifying algebraic fractions (6P)	Worksheets Bingo	1,2,3,4,5,7,8	
1.5 weeks	Proportionality	Direct and inverse proportionality	Worksheets	1,2,3,4,5,7,8	
OCTOBER HOLIDAYS					
2.5 weeks	Enlargement & the intercept theorem	Enlargement & reduction, congruent & similar triangles, intercept theorem	Worksheets	1,2,3,4,5,7,8	Graded homework, tests (formative and sommative)
2 weeks	Statistics 1	Different types of data, frequencies, measures of central tendency / spread	Worksheets, investigations	1,2,3,4,5,6,7,8	
CHRISTMAS HOLIDAYS					
2 weeks	Trigonometry	Trigonometry in a RAT	Worksheets, Geogebra	1,2,3,4,5,7,8	Graded homework, tests (formative and sommative)
1.5 weeks	Basic probability	Sample space, random experiment, events	Worksheets, games	1,2,3,4,5,6,7,8	

2.5 weeks	Vectors	Free vectors (6P), coordinate systems, transformations	Worksheet, Geogebra	1,2,3,4,5	
FEBRUARY HOLIDAYS					
3 weeks	Linear models	Linear equations and graphs, linear functions (6P)	Worksheets, Geogebra	1,2,3,4,5	Graded homework, tests (formative and summative)
1.5 weeks	Probability	Independent, mutually exclusive & exhaustive events	Worksheets	1,2,3,4,5,6,7,8	
2.5 week	Polynomials	Simplify, factorise & order polynomials, multiply polynomials (6P), Pascal's triangle (6P), solve simple quadratic equations (6P)	Worksheets, Geogebra	1,2,3,4,5,7	
EASTER HOLIDAYS					
2 weeks	Statistics	Representing & comparing data	Worksheets, investigations	1,2,3,4,5,6,7,8	Graded homework, tests (formative and summative)
2 weeks	Systems of equations	Solving simultaneous equations graphically and algebraically	Worksheets, games	1,2,3,4,5,7,8	
1.5 weeks	Surds	Properties of surds, rationalizing the denominator	Worksheets, games	1,2,3,4,5,7,8	

* Link to 8 key competences:

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| 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 |

Notes :

- The mathematics syllabus states “The European Schools’ syllabuses seek to develop all of these key competences in pupils. Key competences are that general that we do not mention them all the time in the Science and Mathematics syllabuses”.
- A self-assessment “Checklist” is available on Pronote detailing the competencies and prior knowledge for each chapter, detailing what is asked for for 4P and for 6P