Westfield Academy - Curriculum Information

What your child will learn in …**(ADD VERY BRIEF INTENT)**

Maths

Head of Department	C. Okemadu
Head of Department email	cho@westfield.academy
Lessons per 2 week cycle	8
Specification/Board details/Key stage	OCR/Edexcel

WESTFIELD ACADEMY
believe | strive | achieve

Term by term

Autumn 1	Autumn 2	Spring 1
Factors, Multiples, HCF & LCL Square and Cube roots Algebraic Expressions involving fractions Negative numbers: all four operations Fractions, Decimals and Percentages. Convert recurring decimals to fractions Standard Form Estimation, Rounding Upper and Lower bounds Review of basic algebra: simplify, Expressions, Expand brackets Student Research/Problem Solving	Factorise expressions Equations with integer coefficients Equations with simple fractions Represent and solve inequalities Changing the subject of an equation Multiplying out and factorising single and double brackets Linear sequences Non-linear sequences (geometric, quad Nth term of a quadratic sequence Student Research/Problem Solving	Review of angle facts Angles in polygons Standard constructions using compasses Problems involving loci and intersecting loci Pythagoras' theorem in 2 and 3 dimensions Trigonometry in right-angled triangles Student Research

Spring 2	Summer 1	Summer 2
Mid-point, length and gradient of a line segment Review of plotting linear graphs Use and understand = + c Simultaneous equations: graphical solutions Simultaneous equations: algebraic solutions Plot quadratic, cubic and reciprocal graphs Sketching graphs Student Research	**Ratio & Proportion** Direct proportion Graphs of quantities in direct proportion Ratio calculations Percentages and percentage changes without a calculator Percentages and percentage changes with a calculator Reverse percentages Compound interest and depreciation Compound measures, including speed and density Student Research/Problem Solving	Area and perimeter of shapes Arcs, Sectors and Segments Volume and Surface area Solids Student Research

Key Skills developed	
Useful Websites	https://maths.sparx-learning.com/teacher/school-settings/subscription
Reading/Literacy requirements /Key Words	Factor Multiple Index Expression Angle Polygon Locus Gradient Simultaneous Equation Ratio Proportion Subject of Formula Area Circumference
Homework requirements	Two times a week

Personal Development Links	https://corbettmaths.com/5-a-day/gcse/ https://sites.google.com/westfield.academy/ks3maths/home
Trips/Visits (If applicable)	The Bletchley school trip offers our Year 9 students a unique insight into World War II history and the origins of modern computing. The hands-on learning experience provided by Bletchley Park staff provides an engaging opportunity for students to test their teamwork, critical thinking and problem solving skills