FEATHERSTONE HIGH SCHOOL
TOGETHER WE ACHIEVE

YEAR 7 MATHEMATICS
LEARNING JOURNEY

Build skills • Explore mathematics • Prepare for the future

MathsWatch

> "Without mathematics, there is nothing you can do.
> Everything around you is mathematics.
> Everything around you is numbers."
> — Shakuntala Devi

MATHS IN THE REAL WORLD

Building scale drawings



Scale drawings help architects and engineers design buildings safely and accurately.

Shopping discounts



Percentages help us understand discounts and best value.

Fractions in food



Fractions help us share food equally and fairly.

Timetables and travel



Timetables and travel planning use time, distance and calculations.

Navigation and maps



Maps and navigation use coordinates and scale to find our way.

Coding and technology



Coding and technology use mathematics to build games and apps.

START OF YEAR 7

AUTUMN TERM – BUILDING STRONG NUMBER FOUNDATIONS

1	2	3	4	5	6
Transition Activities	Place Value	Factors, multiples & primes	HCF and LCM	Square and Cube Numbers	Negative Numbers & Order of Operations
		24 → 2, 12 → 2, 2, 3	12 and 18	$4^2 = 16$	B I D
			HCF = 6	$3^3 = 27$	M A S
			LCM = 36		

ASSESSMENT POINT 1 – END OF AUTUMN TERM

Number Sense and Calculations Assessment

- ✓ Fluency with calculations
- ✓ Number knowledge
- ✓ Problem solving in real-life contexts
- ✓ Order of operations



SPRING TERM – THINKING ALGEBRAICALLY

1	2	3	4	5	6	7
Algebraic Expressions	Substitution	Expanding Expressions	Factorising Expressions	Coordinates	Fractions	Multiplicative Relationships
$3x + 2$	$2x + 3$, $x = 4$	$2(x + 3) = 2x + 6$	$x^2 + 5x = x(x + 5)$	(−2, 3)	$\frac{1}{2} + \frac{1}{3} =$	$y = kx$

ASSESSMENT POINT 2 – END OF SPRING TERM

Algebra and Fractions Assessment

- ✓ Algebraic skills
- ✓ Fraction fluency
- ✓ Problem solving
- ✓ Confidence
- ✓ Multiple step problems
- ✓ Multiplicative relationships



SUMMER TERM – SHAPE, SPACE AND CHANCE

1	2	3	4	5	6	7	8
Area of 2D Shapes	Area of Compound Shapes	Symmetry	Congruency	Construction	Transformations	Probability	Real-Life Problem Solving and Reasoning
$A = l \times w$					Reflection, Rotation, Translation	$P(6) = \frac{1}{6}$	

ASSESSMENT POINT 3 – END OF SUMMER TERM

Geometry and Probability Assessment

- ✓ Area and perimeter
- ✓ Transformations and constructions
- ✓ Probability
- ✓ Real-life problem solving



LOOKING AHEAD TO YEAR 8

- a^n Indices
- % Ratio and Proportion
- // Angles in Parallel Lines
- Volume of 3D Shapes
- Equation of a Line
- Bearings
- 0.88 Rounding to Significant Figures — $2.34 \approx 2.3$ (2 s.f.)
- Geometric Reasoning

YOUR JOURNEY CONTINUES...

Build confidence.
Keep practising.
Achieve your best.

> "The only way to learn mathematics is to do mathematics"
> — Paul Halmos

ENRICHMENT & OPPORTUNITIES

Competitions & Challenges

- UKMT Maths Challenge
- World Numeracy Day
- Pi Day Celebration

Clubs

- Chess Club
- Rubik's Cube Club
- Maths Enrichment Club



HOW WE ASSESS

- ✓ Fortnightly Progress Checks
- ✓ Retrieval Practice
- ✓ Classwork (Quizzes)
- ✓ Classroom (MathsWatch)
- ✓ End of Term Assessments

WEEKLY HOME LEARNING

MathsWatch

MathsWatch Tasks

- Ensure modelled solutions are written into orange books.



TOGETHER WE ACHIEVE

INCLUSION We value everyone and celebrate inclusion.

CARE We care for our school community and support one another.

RESPECT We treat everyone with dignity and respect.

CHALLENGE We embrace challenge and enrich our learning.

RESILIENCE We keep going and learn from our setbacks.

PARTNERSHIP We work together and celebrate success.

FHS VALUES