The Year 7 Curriculum: Mathematics

UP HOLLAND HIGH SCHOOL
Dedicated to Excellence

Probability

Probability scale
Sample space diagrams
Mutually exclusive events
Express a probability

FDP

FDP
$\frac{3}{4}$ of ? = 24
Fraction of amount
Dividing fractions
$\frac{7}{15} \div \frac{3}{4}$
Multiplying fractions
$\frac{1}{3} \times \frac{1}{10}$
Reciprocals

End of Year Assessment

Proportion

Reasoning
Direct proportion

Half Term

Data

Tally charts
Two way tables
Range
Mode
Averages from frequency tables
Pictograms
Mean
Median

Angles

Measuring and drawing angles
Angles on a line
Angles in a triangle
Estimating angles
Types of angles
Angles around a point
Vertically opposite angles

Term 2 Assessment

Brackets

Expand a single bracket
$5(3n - 4)$
Factorise into a single bracket
Expand and simplify
$3(n + 2) - 2(n - 3)$
Distributive law
$a(b + c) = ab + ac$

Fractions

Add and subtract fractions
$\frac{2}{4} + \frac{3}{8} =$
Simplifying fractions
$\frac{6 \div 2}{8 \div 2} = \frac{3}{4}$
Fractions of shapes
Improper & mixed fractions
Ordering fractions
Equivalent fractions

Half Term

Factors & Multiples

Prime and prime decomposition
Multiples and LCM
Factors and HCF
Divisibility tests

Shape & Coordinates

Shape properties
Symmetry
Perimeter of compound shapes
Area of rectangles and triangles
Coordinates
Line properties
Perimeter of a rectangle
Area of compound shapes

Term 1 Assessment

Measures

Converting units of length, mass and capacity
Calculating with time
Converting units of time
Solving equations
$2x - 3 = -7$
Estimate and measure length, mass and capacity
Reading clocks

Expressions & Equations

Substitution
$2y + 7$ ($y = 4$)
2y means 2 x y
$= 2(4) + 7$
$= 8 + 7$
$= 15$ ✓
Simplifying expressions
$7y + 5y + 2h + 2h$
$9e + 2 + e + 2$
Using algebraic notation
xy represents $x \times y$

Negative numbers & BIDMAS

Order of operations
Ordering negative numbers
-10, -8, -5, -3, -2, -1
Add and subtract negative numbers
-4 + 3
-6 + 4
-8 + 5
Associative law
Commutative law
a + b = b + a
xy = yx
Zero Pair
Understanding zero pairs
(-3) × (-2) = +6
Multiplying and dividing negative numbers

Half Term

Number

Calculate with roots and powers
$4^3 = 4 \times 4 \times 4$
Multiply two decimals
0·03 × 0·08
Multiply using place value
7 3 4
× 7 4
Add/subtract integers and decimals
31.773 ÷ 5.1
Divide two decimals
Division of Decimals by Whole Numbers
Multiplying integers
Rounding

Year 7