

# Mathematics

All students will sit a summative assessment at the end of each term to track progress – scores will be given as percentages. Throughout each term students will receive mini fluency quizzes once a fortnight to assess their knowledge and identify any gaps.

Year 9

End of Term Assessment

**Skills**  
Calculate averages for grouped data

Measuring data

Presenting data

**Skills**  
Read and draw graphs for grouped data

Understanding Risk 2

Calculating space



**Skills**  
Perimeter, area and volume in circles

**Skills**  
Calculating the probability of 2 events

Algebra - Visualising

**Skills**  
Plotting and using graphs



End of Term Assessment

Solving equations

Calculating f/d/p

**Skills**  
Calculate unknown values including negatives and fractional answers

**Skills**  
Working with percentage increase/decrease

**Skills**  
Ratio problems and best buys



Proportional reasoning

Pattern Sniffing

Investigating angles

**Skills**  
Finding and using the nth term

2, 4, 6, 8, 10, 12, 14

**Skills**  
Calculate unknown angles in shapes and with parallel lines

Visualising and Constructing

End of Term Assessment

Exploring f/d/p

**Skills**  
Relationship between fractions and decimals

**Skills**  
Index laws, substitution and rearranging formulae

Algebra - Tinkering

**Skills**  
Enlargements and bearings



Understanding Risk 1

**Skills**  
Introduction to probability – probability scale, vocabulary



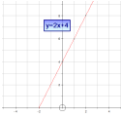
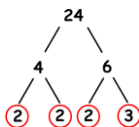
Numbers and the Number System

YEAR 8

**Skills**  
Use the 4 operations with directed numbers

**Skills**  
Product of Primes and Standard Form

Mathematical thinking/recall



By the end of term 3 students should be able to draw and interpret linear graphs from an equation and calculate the area and circumference of circles

By the end of term 2 students should be able to calculate percentage change, find multipliers in proportion problems, find the nth term of a sequence and solve linear equations with unknowns on both sides.

By the end of term 1 students should be able to write numbers in standard form, use 4 operations with negative numbers, calculate probability of an event, simplify expressions with indices, factorise expressions, rearrange simple formulae and convert between fractions and decimals