

Autumn Term 1 Maths

What? When? Why?	Lesson 1 Learning intentions (what can a student do at the end of the lesson)	Lesson 2 Learning intentions (what can a student do at the end of the lesson)	Lesson 3 Learning intentions (what can a student do at the end of the lesson)	Lesson 4 Learning intentions (what can a student do at the end of the lesson)
Week 1 Ratio and scale	Understand the meaning and representation of ratio	Understand and use ratio notation, from diagrams and numerically	Solve problems involving ratios of the form 1:n or n:1, from diagrams, descriptions, and using bar modelling	Solve problems involving ratios of the form m:n, using a number of strategies including bar modelling
Week 2 Ratio and scale	Divide in a given ratio, using a number of strategies including bar modelling	Express ratios in their simplest integer form, from problems given both in diagrammatic and numerical form	Express ratios in the form 1:n from problems given both in diagrammatic and numerical form	Compare ratios and fractions using diagrams and descriptions
Week 3 Multiplicative change	Solve problems involving direct proportion	Learn to use conversion graphs (explore direct proportion graphs for higher ability students)	Convert between currencies	Understand scale factors as multiplicative representations
Week 4 Multiplicative change Multiplying and dividing fractions	Draw and interpret scale diagrams	Interpret maps using ratios and scale factors	Represent multiplication of fractions	Multiply a fraction by an integer
Week 5 Multiplying and dividing fractions	Find the product of a pair of unit fractions	Find the product of a pair of any fractions	Divide an integer by a fraction	Divide a fraction by a unit fraction
Week 6 Multiplying and dividing fractions	Understand and use the reciprocal	Divide any pair of fractions	Multiply and divide improper and mixed fractions	Multiply and divide algebraic fractions
Week 7 Formative assessment Working in the Cartesian plane	Formative assessment	Follow up to assessment	Work with co-ordinates in all 4 quadrants	Identify and draw lines parallel to the axes

Autumn Term 2 Maths

What? When? Why?	Lesson 1 Learning intentions (what can a student do at the end of the lesson)	Lesson 2 Learning intentions (what can a student do at the end of the lesson)	Lesson 3 Learning intentions (what can a student do at the end of the lesson)	Lesson 4 Learning intentions (what can a student do at the end of the lesson)

Week 1 Working in the Cartesian plane	Recognise and use the line $y = x$	Recognise and use lines of the form $y = kx$	Link $y = kx$ to direct proportion problems (Explore the gradient of the line $y = kx$ for more able students)	Recognise and use lines of the form $y = x + a$
Week 2 Working in the Cartesian plane	Explore graphs with negative gradient ($y = -kx$, $y = a - x$, $x + y = a$)	Link graphs to linear sequences	Plot graphs of the form $y = mx + c$ (Explore non-linear graphs for more able students)	Find the midpoint of a line segment
Week 3 Representing data	Draw and interpret scatter graphs	Understand and describe linear correlation	Draw and use the line of best fit	Identify non-linear relationships
Week 4 Representing data	Identify different types of data	Read and interpret ungrouped frequency tables	Read and interpret grouped frequency tables	Represent grouped discrete data
Week 5 Representing data Probability	Represent continuous data grouped into equal classes	Construct and interpret two way tables	Construct sample spaces for one or more events	Find probabilities from a sample space
Week 6 Probability	Find probabilities from two way tables	Find probabilities from Venn diagrams	Use the product rule for finding the total number of possible outcomes	Review
Week 7	Review	Review	Assessment	Feedback