Autumn Term 1 Maths Year 7

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 Sequences	Describe and continue sequences • Understand the difference between linear and non linear sequences.	Predict and check next term(s) • Generate terms of a sequence from term to term rule.	Sequences in a table and graphically • Recognise arithmetic sequences.	Linear and non-linear sequences • Move freely between different numerical, algebraic, graphical and diagrammatic representations.
Week 2	Continue linear sequences • Make and test conjectures about patterns and relationships.	Continue non-linear sequences • Substitute values in expressions, rearrange and simplify expressions.	Explain the term-to-term rule • Describe how sequences change from one term to the next eg. linear or non linear	Explain the term-to-term rule Find missing terms (H) • Produce graphs of linear functions of one variable.
Week 3	Given a numerical input, find the output of a single function machine • Use function machines alongside bar modelling and letter notation.	Use inverse operations to find the input given the output. Use diagrams and letters to generalise number operations • Invest time in single function machines and the links to inverse operations before moving on.	Use diagrams and letters with single function machines Find the function machine given a simple expression • Move freely between different numerical, algebraic, graphical and diagrammatic representations	Substitute values into single operation expressions • Rearrange and simplify expressions whilst substituting values.
Week 4	Find numerical inputs and outputs for a series of two function machines. Use diagrams and letters with a series of two function machines	Find the function machines given a two-step expression	Substitute values into two-step expressions	Generate sequences given an algebraic rule Represent one- and two-step functions graphically
Week 5	Understand the meaning of equality	Understand and use fact families, numerically and algebraically	Solve one-step linear equations involving +/- using inverse operations	Solve one-step linear equations involving x/÷ using inverse operations
Week 6	Understand the meaning of like and unlike terms	Understand the meaning of equivalence	Simplify algebraic expressions by collecting like terms, using the ≡ symbol	REVIEW
Week 7	ASSESSMENT	FEEDBACK	CALCULATED COLOURING	

Autumn Term 2

What? When?	Lesson 1 Learning intentions	Lesson 2 Learning intentions	Lesson 3 Learning intentions	Lesson 4 Learning intentions

Why?	(what can a student do at the end of the lesson)	(what can a student do at the end of the lesson)	(what can a student do at the end of the lesson)	(what can a student do at the end of the lesson)
Week 1 Place Value	Recognise the place value of any number in an integer up to one billion	Understand and write integers up to one billion in words and figures	Work out intervals on a number line	Position integers on a number line
Week 2	Round integers to the nearest power of ten	Compare two numbers using =, ≠, , ≤, ≥	Order a list of integers	Find the range of a set of numbers
Week 3	Find the median of a set of numbers	Understand place value for decimals	Position decimals on a number line	Compare and order any number up to one billion
Week 4 : Fraction, Decimal and Percentage Equivalence	Represent any fraction as a diagram	Represent fractions on number lines	Identify and use simple equivalent fractions	Understand fractions as division
Week 5	Convert fluently being fractions, decimals and percentages	Explore fractions above one, decimals and percentages	Represent any fraction as a diagram	Represent fractions on number lines
Week 6	Identify and use simple equivalent fractions	Understand fractions as division	Convert fluently being fractions, decimals and percentages	Explore fractions above one, decimals and percentages
Week 7	ASSESSMENT	FEEDBACK	FUN	FUN