

Birkdale High School		Mathematics Department Foundation Stage	Curriculum Map
Unit 4: Simple equations		Year Group: 7	
INTENT: Aims of the Unit	IMPLEMENTATION: Knowledge and delivery	IMPACT: Assessment	
<p>In Mathematics Year 7 we are looking at students completing the Mastery approach to learning. In this unit we are looking to introducing and solve equations.</p> <p>Having studied positive and negative numbers students start to learn about abstract mathematics and to understand that the rules for integers hold true in an algebraic context and including writing expressions and formulae and start to solving equations using manipulatives.</p>	<p>Knowledge</p> <ul style="list-style-type: none"> Equations in one variable Writing equations to solve problems <p>Delivery</p> <ul style="list-style-type: none"> Teacher led instruction using activstudio Class discussion WAGOLs Bar Modelling Random/Targeted Questioning Textbook questions Tutorial lessons <p>Possibly to include</p> <ul style="list-style-type: none"> Variation theory Treasure hunts Puzzles Mathsbox settlers Manipulatives 	<p>What knowledge are you assessing?</p> <ul style="list-style-type: none"> understanding the concept of equations and balancing solve one step simple equations in one variable using a T bar method solve two step equations in one variable using a T bar method solve equations with unknowns on both sides <p>Which elements of fluency of knowledge are you assessing?</p> <ul style="list-style-type: none"> Express written problems in algebraic notation Set up formulae to connect variables Evaluate expressions and formulae by substitution write simple equations in one variable to solve problems (involving unknown on one and two sides) 	
Enabling Learning			
<ul style="list-style-type: none"> four operations in number for positive and negative integers squares and cubes of numbers GEMS algebraic notation 			
Key Vocabulary		Wider Learning	
<p><i>Tier 2: High frequency / Multiple meaning</i> represent, letters, substitute, expression, simplify, term, formula, express, linear, solve, equation</p>		<p><i>Tier 3: Subject related.</i> algebra</p>	
		<p>SMSC / RWCM / CEIAG</p>	

Birkdale High School		Mathematics Department Foundation Stage		Curriculum Map	
Unit 5: Fractions			Year Group: 7		
INTENT: Aims of the Unit		IMPLEMENTATION: Knowledge and delivery		IMPACT: Assessment	
<p>In Mathematics Year 7 we are looking at students completing the Mastery approach to learning. In this unit we are looking at introducing algebra.</p> <p>Having studied postive and negative numbers this chapter introduces fractions as part of a whole and learning to use all four operations with fractions.</p>		<p>Knowledge</p> <ul style="list-style-type: none">Quantities as fractionsEquivalent fractions and comparing fractionsFraction of a quantityAddition and subtraction of fractions and mixed numbersMultiplication of fractions and mixed fractionsDivision of fractions and mixed fractionsUse of calculator for fractions <p>Delivery</p> <ul style="list-style-type: none">Teacher led instruction using activstudioClass discussionWAGOLLSRandom/Targeted QuestioningTextbook questionsTutorial lessons <p>Possibly to include</p> <ul style="list-style-type: none">Variation theoryTreasure huntsPuzzlesMathsbox settlersManipulatives		<p>What knowledge are you assessing?</p> <ul style="list-style-type: none">Identify types of fractionsFind equivalent fractionsFind fraction of an amountCompare two or more fractionsAdd and subtract fractionsMultiply and divide fractionsUse calculator to evaluate fraction problems	
Enabling Learning				<p>Which elements of fluency of knowledge are you assessing?</p> <ul style="list-style-type: none">Convert between types of fractionsOrder a list of fractionsFind a fraction of a quantitysolve wordy problems using all four operations and fractions	
<ul style="list-style-type: none">four operations in number for positive and negative integersBIDMASunderstanding that fraction is part of a wholemultiples and common multiplesrecognise types of fractions					
Key Vocabulary			Wider Learning		
Tier 2: High frequency / Multiple meaning fraction, quantity, rational, irrational, equivalent, top heavy, compare, proper, multiples, common, improper		Tier 3: Subject related. denominator, numerator, reciprocal		SMSC / RWCM / CEIAG	