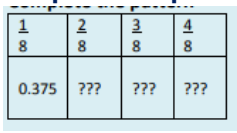
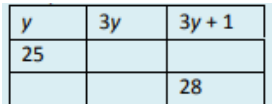
Highgate Primary
Year 6 Maths Curriculum

WALT: We Are Learning To
WAP: We Are Practising

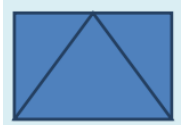
Number
Measurement
Geometry
Statistics
Algebra
Ratio and Proportion

Spring 1: The Body in Question

Week	Unit	National Curriculum objectives Possible lesson objectives	White Rose Maths (WRM) 'small steps'	Models and images representing number Key vocabulary	Reasoning (in addition to WRM questions)	Fluency
1	**Number** **Fractions, decimals and percentages**					
	• associate a fraction with division and calculate decimal fraction equivalents • recall and use equivalences between simple fractions, decimals and percentages, including in different contexts		• Fractions to percentages • Equivalent FDP • Order FDP	Fraction wall	**Give an example** Of a fraction that is greater than 1.1 and less than 1.5. Now another example that no one will think of. Explain how you know. **Complete the pattern**  Complete the table. **Another and another** Write a unit fraction which has a value of less than 0.5? … and another, … and another, … **Ordering** Starting with the largest: 23%, 5/8, 3/5, 0.8 **NRICH In the Money**	MyMiniMaths
2	• solve problems involving the calculation of percentages		• Percentage of an amount • Percentage missing numbers	Bar model	**What else do you know?** 88% of a sum of money = £242. Make up some other statements. Write real life problems for your number sentences. **Undoing** I think of a number and then reduce it by 15%. The number I end up with is 306. What was my original number?	MyMiniMaths

				In a sale where everything is reduced by 15% I paid the following prices for three items. £255, £850, £4.25 What was the original selling price? **NRICH Would You Rather?**	
3	**Algebra**				
	• use simple formulae • generate and describe linear number sequences • express missing number problems algebraically	• Find a Rule – One Step • Find a Rule – Two Step • Forming Expressions • Substitution • Formulae	Bar model	**Generalising** Write a formula for the 10th, 100th and nth terms of the sequences below. 4, 8, 12, 16 …… 0.4, 0.8, 1.2, 1.6 …….. **Undoing** The diagram below represents two rectangular fields that are next to each other  Field A is twice as long as field B but their widths are the same and are 7.6 metres. If the perimeter of the small field is 23m what is the perimeter of the entire shape containing both fields? **Working forwards and backwards** If y stands for a number complete the table below  What is the largest value of y if the greatest number in the table was 163? **NRICH Two and Two** **NRICH Different Deductions** **NRICH Holes**	MyMiniMaths
4	• find pairs of numbers that satisfy an equation with two unknowns • enumerate possibilities of combination of variables	• Forming equations Solve simple one-step equations • Solve two-step equations	Bar model	**Do, then explain** p and q each stand for whole numbers. p + q = 1000 and p is 150 greater than q. Work out the values of p and q. Explain how you did it.	MyMiniMaths

y	3*y*	3*y* + 1
25		
		28

		• Find pairs of values		If 2a + b = 110 and a + 2b = 130, can you find the values of a and b? Explain how you did it. Can you create a similar puzzle for a partner? **NRICH Price Match**	
5	**Measurement** **Conversion between units of measure**				
	• Solve problems involving calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate • Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places • Convert between miles and kilometres	• Metric measures • Convert metric measures • Calculate with metric measures • Miles and kilometres • Imperial measures	Ruler, metre stick, other measuring scales, bar model, number line	**Top Tips** Put these amounts in order starting with the largest. 100 cm3 1000000 mm3 1 m3 Explain your thinking **What do you notice?** 8 km = 5 miles 16km = miles 4 km = miles Fill in the missing number of miles. Write down some more facts connecting kilometres and miles **Would you rather?** On a long car journey, of say 200 miles (about 320 kilometres), you keep asking your parent how much further to go. Would you rather they answered in miles or kilometres? Give a reason for your answer.	MyMiniMaths
6	**Measurement** **Area, perimeter and volume (1)**				
	• Recognise that shapes with the same areas can have different perimeters and vice versa • Recognise when it is possible to use formulae for are and volume of shapes • Calculate the area of parallelograms and triangles	• Shapes - same area • Area and perimeter • Area of a triangle (1) • Area of a triangle (2) • Area of a triangle (3)	Bar model, ruler	**Testing conditions** A square has the perimeter of 12 cm. When 4 squares are put together, the perimeter of the new shape can be calculated. For example:  What arrangements will give the maximum perimeter? What would give the minimum? **Always, sometimes, never** A triangle's area is half the area of the rectangle that encloses it: 	MyMiniMaths