#### Whole Numbers

#### (NMM)

Heading	Description	Completed	I Can Do this © @ 8
Place value	Writing numbers in units, tens, hundreds and thousands.		
	e.g. the number 3 thousand, two hundred and five is 3205.		
Rounding	Rounding to the nearest 10, 100 and 1000.		
Rounding	e.g. 128 rounded to the nearest hundred is 100.		
Estimating - addition and	Finding approximate answers.		
subtraction	e.g. 46 +27 estimate 50+30 = 80		
Mental maths	Mental methods for adding and subtracting		
	Multiplying and dividing by 10 and 100		
Multiplying and Dividing by 10	e.g. 748 x 10 = 7480 7480 ÷100 = 74.8		
Mental maths	Mental methods for multiplication and division.		
Estimating - Multiplication	Finding approximate answers.		
and division	e.g. 46 x27 estimate 50 x 30 = 1500		
Mental maths	Mental methods for adding and subtracting		
Multiplying by two digit	e.g. 18 x 24 = 18 x 20 + 18 x 4		
numbers	= 18 x 20 + 18 x 4 = 432		



#### **Sequences, Multiples and Factors**

### (NMM)

Heading	Description	Completed	I Can Do this ☺ ☺ ⊗
Sequences	Continuing sequences and finding rules e.g. 3,7,1115,19 rule is add 4		
Multiples	Finding multiples of a number. e.g. multiples of 5 are 5, 10, 15, 20, 25		
Factors	Finding factors of a number. e.g. factors of 48 are 1,2,3,4,6,8,12,16,24,48 1 x 48 2 x 24 3 x 16 4 x 12 6 x 8		



#### **Symmetry**

# (SPM)

Heading	Description	Completed	I Can Do this ©
Lines or axes of symmetry	Line of symmetry		
<b>Reflection</b> Image	Reflection is used to complete the missing side of a symmetrical shape.		



# **Fractions**

# (NMM)

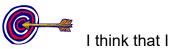
Heading	Description	Completed	I Can Do this © © 8
Understanding fractions	The numerator is the number on the top. The denominator sits on the bottom. e.g. <u>3</u> of the bar is black 5 The denominator here is 5.		
Equivalent fractions	Multiply numerator and denominator by the same number. e.g. $\frac{1}{3} = \frac{4}{12}$ $\frac{9}{10} = \frac{63}{70}$ $\frac{3}{4} = \frac{15}{20} = \frac{21}{28}$		
Simplifying fractions	Divide numerator and denominator by the same number e.g. $\frac{12}{30} = \frac{6}{15} = \frac{2}{5}$ $\frac{28}{49} = \frac{4}{7}$		
Calculating a fraction of a quantity	To find a fraction of a quantity, divide by the denominator then multiply by the numerator. e.g. $\frac{1}{4}$ of £12 = £12 ÷4 = £3 To find $\frac{5}{9}$ of 72, first divide by 9 then multiple by 5 $\frac{1}{9}$ of 72 = 72 ÷ 9 = 8 so $\frac{5}{9}$ of 72 = 8×5 = 40		
Mixed numbers	$\frac{30}{4} = \frac{15}{2} \qquad 6 \times \frac{3}{5} = \frac{18}{5} \\ = 7\frac{1}{2} \qquad = 3\frac{3}{5}$		



#### **Angles**

# (SPM)

Heading	Description	Completed	I Can Do this © © ⊗
Naming angles	An angle is named by its letters. e.g. Angle ABC is written $\angle$ ABC or $ABC$ $A^{Arm}$ B C Vertex		
Measuring and Drawing Angles	Measuring and drawing angles using a protractor. Be careful and use the correct scale.		
Types of angles	Acute Right (perpendicular) Obtuse		
Related Angles	Complementary angles add up to 90° Supplementary angles add up to 180° Vertically opposite angles are equal. Angles in a triangle add up to 180°		
Compass Bearings	Points of the compass 3 figure bearings S East = 090°		



#### **Decimals**

#### S1 B (Medium)

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Heading	Description	Completed	I Can Do this © 😐 🖄
Place Value	<ul> <li>Writing numbers in hundredths, tenths, units, tens, hundreds and thousands.</li> <li>e.g. 150.2 represents the number made up from one hundred, five tens, no units and 5 tenths</li> </ul>		
Rounding	Rounding to nearest whole number and to one decimal point. e.g. 15.63 = 15.6 (1 dp)		
Addition and subtraction of money	examples 2.77 £ 5.68 + $\underline{\text{£} 3.12}$ -£ $\underline{3.25}$ £ 5.89 £ 2.43		
Multiplying and Dividing	E.g. 3.4 x 2 = 6.8 12.15 ÷3 =4.05		
Multiplying and Dividing by 10	Multiplying and dividing by 10 and 100 e.g. 7.48 x 10 = 74.8 748 ÷100 = 7.48		
Calculating	Using a calculator for money problems.		
Expressing decimals as a fraction	e.g. $0.12 = \frac{12}{100} = \frac{3}{25}$		



#### **Measurement**

# (NMM)

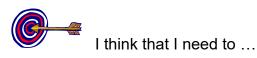
Heading	Description	Completed	I Can Do this © 😐 🖄
Length	100 centimetres = 1metre e.g. 254 cm = 2.54 m		
Weight	1000 grams = 1 kilogramme e.g. 560 g = 0.560 Kg		
Volume	1000 millilitres = 1 litre e.g. 250 ml = 0.25 l		



#### **Coordinates**

# (SPM)

Heading	Description	Completed	I Can Do this © 😐 ৪
Cartesian axes	The horizontal line is called the x – axis. It is labelled x. The vertical line is called the y – axis. It is labelled y.		
	The point where the x – axis and y - axis cross is called the origin. It is labelled O.		
<b>Reading</b> <b>Coordinates</b> Read along the x – axis, then up the y - axis	e.g. A(3,1) B(2,5)		
Plotting Coordinates	e.g. To Plot C(4,2), count 4 units along from the origin, then go 2 units up.		



#### **Percentages**

# S1 B (Medium)

Heading	Description	Completed	I Can Do this ☺ ≌ ⊗
Percentage	% means out of 100 e.g. 45% means $\frac{45}{100}$		
Common percentages	e.g. $75\% = \frac{75}{100} = \frac{3}{4}$ $10\% = \frac{10}{100} = \frac{1}{10}$		
Using one percent	e.g. To find 6% of 120, find 1% then multiply by 6. $1\% \ of \ 120 = 1.2$ $6\% \ of \ 120 = 1.2 \ x \ 6 = 7.2$		
Using ten percent	e.g. To find 60% of 120, find 10% then multiply by 6. $1\% \ of \ 120 = 1.2$ $6\% \ of \ 120 = 1.2 \ x \ 6 = 7.2$		
Percentage increase and decrease	e.g. Find the sale price of a CD costing £12 that is reduced by 25%. 25% of £12 =£3 so sale price = £12 - £3 = £9		
Changing fractions to percentages	$\frac{45}{60} = \frac{3}{4} = 0.75$ 0.75 x 100 = 75%		



#### 2D Shape

# (SPM)

Heading	Description	Completed	I Can Do this ☺ ≌ ⊗
2 D Shapes			
Squares and Rectangles	Properties of squares and rectangles		
Triangles	Isosceles right angled equilateral scalene Acute-angled Right -angled Obtuse-angled		
Perimeter Distance around the edge of a shape.	5  cm 3  cm 12  cm Perimeter = 3 + 5 + 5 + 12 = 25 cm		
Area The amount of surface a shape covers Area of a	$\frac{10 \text{ cm}}{3 \text{ cm}}$ Area = 30 cm <sup>2</sup>		
triangle	Area = <sup>1</sup> / <sub>2</sub> x base x vertical height		



#### **Time**

#### S1 B (Medium)

# (NMM)

Heading	Description	Completed	I Can Do this ☺ ☺ ⊗
Measuring Time	e.g How many minutes are in one week ?		
Telling the Time	Using 12 hour and 24 hour clock notation e.g. 9.30 am = 09:30 9.30 pm = 21:30		
Time intervals	A film starts at 3.15pm and finishes at 4.05pm. How long does it last ? 3.15 pm to 4.00pm is 45 mins 4.00 pm to 4.05pm is 5 min Total length of time is 50 mins		
Shorter Times	e.g. 70 seconds = 1 minute 10 seconds		
Average speed	Average speed = distance $\div$ time e.g. A car travels 80 miles in 2 hours. Its average speed = $80 \div 2 = 40$ mph		



# **Information Handling**

# (IH)

Heading	Description	Completed	I Can Do this © ≌ ⊗
Tables	Reading, interpreting and drawing tables.ModelFrequencyAvensis50Celica50Corrolla100Landcruiser150Yaris50Total400		
Charts and graphs	Reading and drawing bar and line graphs Maths Test Scores $h_{y,y}$ under the Scores $h_{y,y}$ under the Score $h_{y,y}$ und		
Pie charts	Reading pie charts		
Frequency Tables	Model       Frequency         Avensis       50         Celica       50         Corrolla       100         Landcruiser       150         Yaris       50         Total       400		



# Simple Algebra

# (NMM)

Heading	Description	Completed	I Can Do this © © ®
Solving Equations	e.g. $x + 3 = 8$ x = 5 p = 9 12 - p = 3 p = 9		
Forming Equations	$ \begin{array}{c}                                     $		
Simplifying Expressions	e.g. x + x + 6 = 2x + 6 5r +9a –2r + 6a =3r +15a		



#### Ratio

# (NMM)

Heading	Description	Completed	I Can Do this ☺ ☺ ⊗
Ratio	The ratio of sunny days to rainy days is 2 : 3		
Simplifying ratios	Divide each side by the same number e.g. 15 : 5 = 3 : 1		
Ratio and Proportion	e.g The ratio of girls to boys is 3 : 2 How many girls are there when there are 10 boys ? <u>Girls : Boys</u> 3 : 2 15 : 10 There are 15 girls.		
Sharing in a given quantity	e.g. Share £20 in the ratio 2:3 $\frac{1^{\text{St}} \text{ share } 2^{\text{nd}} \text{ share } Total}{2 3 5}$ $8 12 20$		



#### 3 D Shape

# (SPM)

Heading	Description	Completed	I Can Do this © 😐 🖄
Vertices, Edges & Faces	Vertex Edge		
Angles and Diagonals	Plane AEGC is shown		
Volume	For a cuboid Volume = length x breadth x height		
Nets	A net can be folded to make a 3D shape		



# **Formulae**

#### (NMM)

Heading	Description	Completed	I Can Do this ☺ ☺ ⊗
Formulae in words	1 sun 2 suns 3 su = 6 rays = 12 rays = 18 Number of rays = 6 times number of s	8 rays	

