

Year 7 Scheme of Work Part 6

If you are in 7X3, 7X4, 7Y3, 7Y4, 7Z3, 7Z4 please use links from the left hand column (Foundation skills) and middle column (Core Skills).

If you are in in 7X1, 7X2, 7Y1, 7Y2, 7Z1, 7Z2 please use links from the middle column (Core Skills) and right hand column (Mastery)

Every student in Year 7 has been added to Teams by their maths teacher. Each week we will post in Teams to let you know which particular part of the home learning you should focus on and we will set a task every week to assess your learning. You should also use Teams to contact your teacher for help if you need to.

The list below is a guide to what you would normally learn in the last half term if you were in school. Your teacher will be thinking very carefully about what they will ask you to do from this list and we may include some consolidation/revision of things you covered earlier in the year. It is important that you check your school email regularly and log into Teams so that you receive all relevant information and tasks for your class.

Higher Groups 1,2		
Foundation Groups 3, 4		
Foundation Skills	Core Skills	Mastery
Multiplying and dividing by powers of 10. Division by 10, 100, 1000 Video 99 Practice Questions Textbook Exercise Multiplication: by 10, 100 etc Video 202 Practice Questions Textbook Exercise Simplifying fractions. Fractions: simplifying Video 146 Practice Questions Textbook Exercise FDP: key equivalents Video 129 Textbook Exercise Textbook answers	Fraction, Decimal and Percentage conversions (FDP): FDP: percentages to decimals Video 121 Practice Questions Textbook Exercise Practice Questions answers Textbook answers FDP: percentages to fractions Video 122 Practice Questions Textbook Exercise Practice Questions answers Textbook answers FDP: decimals to fractions Video 123 Practice Questions Textbook Exercise Practice Questions answers Textbook answers FDP: decimals to percentages Video 125 Practice Questions Textbook Exercise Practice Questions answers Textbook answers	FDP: decimals to fractions (dealing with trickier decimals, or values greater than one. All questions should be completed non-calculator) Video 124 Practice Questions Textbook Exercise Practice Questions answers Textbook answers FDP: fractions to decimals (using short division or mixed number knowledge where needed. Again, all non calculator) Video 128 Practice Questions Textbook Exercise Practice Questions answers Textbook answers

	<p>FDP: fractions to percentages Video 126 Practice Questions Textbook Exercise Practice Questions answers Textbook answers</p> <p>FDP: fractions to decimals Video 127 Practice Questions Textbook Exercise Practice Questions answers Textbook answers</p> <p>Mixed FDP conversions: FDP: mixture Video 130 Practice Questions Textbook Exercise Practice Questions answers Textbook answers</p>	
<p>Decimals: ordering Video 95 Practice Questions Textbook Exercise Practice Questions answers Textbook answers</p> <p>Fractions: ordering Video 144 Practice Questions Textbook Exercise Practice Questions answers Textbook answers</p>	<p>Ordering FDP: FDP: ordering Video 131 Practice Questions Practice Questions answers Textbook answers</p>	<p>More challenging FDP ordering: Try this maze activity (answers included) and this grid activity (answers included)</p>
<p>Finding simple percentages (50% (half), 25% (a quarter), 75% (50% + 25%), 100% (the whole amount)): here is a quick worksheet</p>	<p>Percentages: of an amount (non-calc) Video 234 Practice Questions Textbook Exercise</p> <p>Percentages: of an amount (calc) Video 235 Practice Questions Textbook Exercise</p> <p>The preferred method for finding a finding a percentage using a calculator is as follows:</p> <p>e.g. 1) Calculate 48% of £260 A) Convert percentage to a decimal $48\% = 0.48$ B) Multiply the amount by the decimal using a calculator: $260 \times 0.48 = 124.8$ C) Interpret the display: Answer is £128.40 (2 d.p. for money answers)</p> <p><u>Proportion: Finding the original amount given the percentage and the part. (non calc)</u></p>	<p>More difficult percentage problems (non calc) are here Answers</p> <p>Worded problems (all non calc) are here Answers</p> <p>Optional extension puzzles: https://nrich.maths.org/1118 https://nrich.maths.org/2648 https://nrich.maths.org/1115</p>

[Here](#) is a worksheet to practice (with answers)

Method:

e.g. 1) 20% of a number is 60. What is the number?

A) 20 goes into 100 five times, so multiply 60 by 5.

B) Answer: $60 \times 5 = 300$

e.g. 2) 75% of a number is 21. What is the number?

A) 75 doesn't go nicely into 100, so try and find a common factor of 75 and 21 to scale the problem down:

B) 75 and 21 are both divisible by 3

C) So, $75\% \div 3 = 25\%$ and $21 \div 3 = 7$. This means 25% of the number is worth 3

D) Notice that 25 fits nicely into 100 (four times), so we can scale up part C) to find the answer

E) Answer: $3 \times 4 = 12$