

# Year 7 Term 1

Learning Aim	Emerging	Developing	Securing	Mastering
Four operations	Four operations with integers to two digits. Shading fractions and adding/subtracting with common denominator	Four operations including negatives, decimals & fractions. BIDMAS.	Identify and perform confidently methods for all operation types including mixed numbers in complex problems	Complex questions which mix number type and order
Examples	$5 \times 7 =$ $38 \times 4 =$ $56 \times 28 =$ $\frac{2}{7} + \frac{3}{7} =$	$-12 \times 7 =$ $3.76 \times 46 =$ $4.8 + 12 \times 5^2$ $\frac{4}{5} - \frac{3}{8} =$	$3\frac{1}{4} \div 2\frac{2}{3} =$ Word questions where students derive operation needed.	$32.7 + 8 \left( \frac{2}{5} - 1\frac{1}{4} \right) =$
Rounding & estimating	Understand place value, including multiplying and dividing by 10,100,1000	Rounding to 10, 100, 1000, whole number and decimal places	Round to 1 sf and estimate more complex problems that includes decimal significant figures and BIDMAS	Understand error intervals
Examples	Write the value of 7 in the number 372 $23 \times 10 =$ $4.8 \times 100$ $23 \div 1000$	Round 3547 to nearest 10,100,100 Round 32.87 to nearest whole number & 1dp	Round 23.8 and 0.0349 to 1 sf. Estimate: $\frac{2.8 + 13.7}{9.6 \times 0.04}$	62.2 has been rounded to 1dp. Write the error interval as an inequality
Types of number	Find factors and multiples within the 2,3,4,5 and 10 times table	Understanding deeper knowledge of different types of number: prime, powers roots, HCF/LCM etc	Use concepts of types of number Eg. Prime factorisation to work out HCF and LCM	
Examples	Find the factors of 18 Write a multiple of 4	Explain why 7 is classified a prime number Calculate the HCF and LCM of 8 and 10 $4^3 =$ $\sqrt[3]{27} =$	Use prime factorisation to find the HCF of 108 and 84	

Extension opportunities	Introduction to:
Number	Standard form Indices Surds

You can find practice on all the topics taught this term at [Mathsworkout.co.uk](http://Mathsworkout.co.uk)  
 Login: sarum  
 Password: solid92

Go to Number, sections: 01,02,04,05,06,07,08,09,11,12

Choosing the right level of difficulty for you within each topic area.