

Year 9 Foundation Scheme of learning 2021-2022- 9A3- 9B3

Term 1

Stretch key learning in italics

| Topic | Key learning | MathsWatch | ☹ | ☺ | ☺ |
|--|---|---------------------------|---|---|---|
| Integers and place value | Order integers and decimals using symbols < and > | 2 & 3 | | | |
| | Add, subtract, multiply and divide integers positive and negative | 17 – 20 | | | |
| | Use BIDMAS in calculations | 75 | | | |
| | Check answers by rounding and using inverse operations | 21 & 91 | | | |
| Decimals | Compare and order decimal numbers using the symbols <, > | 3 | | | |
| | Add, subtract, multiply and divide decimals, including calculations involving money | 17, 18, 22a, 22b, 66 & 67 | | | |
| | Round to a given number of decimal places and significant figures | 32 & 90 | | | |
| | Estimate answers to calculations by rounding to 1 significant figure | 91 | | | |
| | <i>Use one calculation to find the answer to another</i> | 92 | | | |
| Indices, powers and roots | Add, subtract, multiply and divide numbers written in index notation | 82 | | | |
| | Use brackets and BIDMAS with powers | 82 | | | |
| | Use calculators with indices | 82 | | | |
| | <i>Add, subtract, multiply and divide numbers in index form</i> | 82 | | | |
| Assessment 1 on topics taught so far this year | | | | | |
| Factors multiples and primes | Use factor trees to write a number as a product of its prime factors | 78 | | | |
| | Find the HCF and LCM of two numbers by listing | 79 & 80 | | | |
| | Find HCF and LCM by using venn diagrams | 79 & 80 | | | |
| | <i>Solve problems with HCF and LCM</i> | 79 & 80 | | | |
| October half term | | | | | |
| Algebra basics and index laws | Simplify expressions by collecting like terms | 33 | | | |
| | Multiply together two simple algebraic expressions, e.g. $2a \times 3b$ | 34 | | | |
| | Simplify expressions by cancelling, e.g. $4x / 2 = 2x$ | 35 | | | |
| | Use index laws in algebra when multiplying or dividing | 82 | | | |
| | Select an expression/equation/formula/identity from a list | | | | |
| Expanding and factoring single brackets | Expand a single set of brackets | 93 | | | |
| | Expand and simplify with two single sets of brackets | 134a | | | |
| | Factorise into a single set of brackets | 94 | | | |
| Expressions and substitution into formulae | Substitute numbers into simple expressions and formulae | 95 | | | |
| | Substitute positive and negative numbers into expressions | 95 | | | |
| | Substitute numbers into expressions involving brackets and powers | 95 | | | |
| | <i>Use kinematics formulae and derive a simple formula</i> | | | | |
| Assessment 2 on topics taught to date | | | | | |
| Pythagoras' theorem | Calculate the length of a side of the triangle using pythagoras | 150a & 150b | | | |
| | Solve problems involving Pythagoras | 150c | | | |
| Christmas holidays | | | | | |