Year 10 Foundation Unit 1 – Factors, multiples, and primes

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| Unit 1 – Factors, multiples, and primes  |   |   |
| 1.1  | Factor  | A number that divides another number exactly  |
| 1.2  | Multiple  | A number which is part of another number's times table  |
| 1.3  | Prime Number  | A number that is only divisible by 1 and itself. Prime numbers only ever have 2 factors  |
| 1.4  | Prime factor decomposition  | Expressing a number as a product of its prime factors  |
| 1.5  | HCF  | Highest common factor  |
| 1.6  | LCM  | Lowest common multiple  |

Year 10 Foundation Unit 2 – Powers and Roots

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| Unit 2 – Powers and Roots  |   |   |
| 2.1  | Square number  | The product when an integer is multiplied by itself  |
| 2.2  | Cube number  | The product when an integer is multiplied by itself twice  |
| 2.3  | The first 15 square numbers are  | 1, 4, 9, 16, 25, 36, 49, 64, 81, 100, 121, 144, 169, 196, 225  |
| 2.4  | The first 5 cube numbers are  | 1, 8, 27, 64, 125  |

Year 10 Foundation Unit 3- Indices



Year 10 Foundation Unit 4 – Standard Form

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| Unit 4 – Standard Form  |   |   |
| 4.1  | Standard form  | A way of writing very big or very small numbers using powers of 10  |
| 4.2  | 10-2  | 0.01  |
| 4.3  | 10-1  | 0.1  |
| 4.4  | 100  | 1  |
| 4.5  | 101  | 10  |
| 4.6  | 102  | 100  |
| 4.7  | 103  | 1000  |
| 4.8  | 0.0004   | 4 x 10-4(the number must be between 1 and 10)  |
| 4.9  | 40000  | 4 x 104(the number must be between 1 and 10)  |

Year 10 Foundation Unit 5 - Sequences

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| **Unit 5 - Sequences**  |   |   |
| **No.**  | **Question**  | **Answer**  |
| 5.1  | A sequence or series is  | A list of numbers that follow a pattern  |
| 5.2  | Term  | A value in a sequence  |
| 5.3  | The term-to-term rule  | Is how you find the next term in the sequence  |
| 5.4  | The nth term rule  | Is a formula that can be used to generate any term in the sequence, this is sometimes called the position to term rule  |
| 5.5  | n  | The position of a term in the sequence  |
| 5.6  | In a linear or arithmetic sequence  | The difference between the terms is always the same  |
| 5.7  | In a geometric sequence  | Multiply by a common ratio to get to the next term  |
| 5.8  | In a Fibonacci sequence  | Add the two previous terms to get the next term  |
| 5.9  | The triangular number sequence  | A sequence of numbers generated by adding one more than was added to find the previous term. For example, 1, 3, 6, 10, 15, 21, ...  |
| 5.11  | In a quadratic sequence  | There is a common second difference  |
| 5.12  | a  | First term in a geometric sequence  |
| 5.13  | b  | Common ration  |
| 5.14  | Common ratio  | The ratio between two consecutive terms in a sequence  |
| 5.15  | The nth terms of quadratic sequences are written in the form  | ax2+bx+c  |