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**Subject: Maths**

**Year: 10**

**Term: Autumn 1**

**Greenwood School Curriculum Summary**

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| **Episode name** | **Episode outline** | **Online link(s)** | **Other Resources** |
| Four Rules | Order positive and negative numbers and use inequality signs and ≠. Use non-calculator methods to calculate the sum, difference, product and quotient of positive and negative integers. | [Core Maths lesson units for Key Stage 4 students - Oak National Academy (thenational.academy)](https://classroom.thenational.academy/subjects-by-key-stage/key-stage-4/subjects/maths/tiers/core) |  |
| Priority of Operations  BODMAS/BIDMAS | Know the conventional order for performing calculations involving brackets, four rules and powers, roots and reciprocals. | [Core Maths lesson units for Key Stage 4 students - Oak National Academy (thenational.academy)](https://classroom.thenational.academy/subjects-by-key-stage/key-stage-4/subjects/maths/tiers/core) |  |
| Definitions and Terms | Use the concepts and vocabulary of prime numbers, factors (divisors), multiples, common factors, common multiples, highest common factor, lowest common multiple, prime factorisation, including using product notation, and the unique factorisation theorem. Understand and use the terms odd, even, prime, factor (divisor), common multiple, square, cube, root. Understand and use place value. | [Core Maths lesson units for Key Stage 4 students - Oak National Academy (thenational.academy)](https://classroom.thenational.academy/subjects-by-key-stage/key-stage-4/subjects/maths/tiers/core) |  |
| Prime Numbers | Identify prime numbers less than 20. Express a whole number as a product of its prime factors. Eg. 24=2x2x2x3 Understand that each number can be expressed as a product of prime factors in only one way. | [Core Maths lesson units for Key Stage 4 students - Oak National Academy (thenational.academy)](https://classroom.thenational.academy/subjects-by-key-stage/key-stage-4/subjects/maths/tiers/core) |  |
| Highest Common Factor (HCF) and Lowest Common Multiple | Find the HCF and LCM of two whole numbers by listing. | [Core Maths lesson units for Key Stage 4 students - Oak National Academy (thenational.academy)](https://classroom.thenational.academy/subjects-by-key-stage/key-stage-4/subjects/maths/tiers/core) |  |
| Square and cubes | Find square numbers up to 15 x 15 and corresponding positive and negative square roots. Recall the cubes of 1,2,3,4,5 & 10. Be able to use square, cube and power keys. To be able to estimate square roots of numbers. | [Core Maths lesson units for Key Stage 4 students - Oak National Academy (thenational.academy)](https://classroom.thenational.academy/subjects-by-key-stage/key-stage-4/subjects/maths/tiers/core) |  |
| Index notation | Use positive integer indices to write, for example: 2x2x2=2³ | [Core Maths lesson units for Key Stage 4 students - Oak National Academy (thenational.academy)](https://classroom.thenational.academy/subjects-by-key-stage/key-stage-4/subjects/maths/tiers/core) |  |
| Laws of indices | Simplifying algebraic products and quotients.  Eg. axaxa = a³, 2ax3b = 6ab | [Core Maths lesson units for Key Stage 4 students - Oak National Academy (thenational.academy)](https://classroom.thenational.academy/subjects-by-key-stage/key-stage-4/subjects/maths/tiers/core) |  |
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