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| Subject: Mathematics Year 7 Curriculum Map 2022-2023 |
| Terms | **Topics covered** and **core knowledge and skills** | Links to careers | Links to the Knowledge organiser and other additional resources |
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| Half term 1 | Place Value:Understand place value for integers and decimalsBe able to exchange between place value columnsRecognise different representations of place valueAxioms and Arrays:Understand the commutative and associative properties of multiplicationRepresent and manipulate multiplication in models and through calculationsUnderstand the distributive property of calculationsRepresent and use the distributive property of multiplication with addition and subtractionFactors and Multiples:Understand the factor properties of integers, prime numbers and square numbersList the factors of integers and be able to decompose and organise numbers based on their factorsList common multiples for sets of integersRepresent and explain patterns in common multiplesOrder of Operations:Understand equal and unequal order of priority between addition, subtraction, multiplication and divisionInterpret and write calculations involving the four operations and brackets | Place Value:<https://www.youtube.com/watch?v=q_3x2svPzkM>Axioms and Arrays:<https://www.youtube.com/watch?v=xm0ZgEImZZA>Factors and Multiples:<https://www.youtube.com/watch?v=xyOCgnixiaE>Order of Operations:<https://www.youtube.com/watch?v=xm0ZgEImZZA> | This link would take you to the KO on our website<https://classroom.thenational.academy/subjects-by-key-stage/key-stage-3/subjects/maths><https://www.bbc.co.uk/bitesize/subjects/zqhs34j><https://vle.mathswatch.co.uk/vle/><https://maritime.rivoagency.com/admin/wp-content/uploads/sites/20/2022/10/U01-Place-Value-KO.pdf><https://maritime.rivoagency.com/admin/wp-content/uploads/sites/20/2022/10/U02-Axioms-and-Arrays-KO.pdf><https://maritime.rivoagency.com/admin/wp-content/uploads/sites/20/2022/10/U03-Factors-and-Multiples-KO.pdf><https://maritime.rivoagency.com/admin/wp-content/uploads/sites/20/2022/10/U04-Order-of-Operations-KO.pdf> |
| Half term 2 | Positive and Negative Numbers:Understand negative numbers and their absolute valueSolve addition problems involving negative numbersSubtract positive and negative numbers from positive and negative numbersMultiply and divide with negative numbersDeduce other known facts from the connections between multiplication and divisionExpressions, equations and inequalities:Understand that algebra expresses mathematical structures and algebraic terms represent unknown or variable numbersSubstitute into, simplify, expand and factorise algebraic expressionsManipulate equations and inequalities to form new equations and inequalitiesForm expressions and inequalities in different contextsSimplify and manipulate algebra in different contexts | Positive and Negative Numbers:<https://www.youtube.com/watch?v=pbP2bdpT27w>Expressions, equations and inequalities:<https://www.youtube.com/watch?v=BzKMckyLYzk><https://www.youtube.com/watch?v=5sOw5og5sgc> | <https://maritime.rivoagency.com/admin/wp-content/uploads/sites/20/2022/10/U05-Negative-and-positive-numbers-KO.pdf><https://maritime.rivoagency.com/admin/wp-content/uploads/sites/20/2022/10/U06a-Expressions-Equations-and-Inequalities-KO.pdf><https://maritime.rivoagency.com/admin/wp-content/uploads/sites/20/2022/10/U06b-Expressions-Equations-and-Inequalities-KO.pdf> |