| Subject | Year | Month |  | Balcarras |
| :---: | :---: | :---: | :---: | :---: |
| Mathematics | 10 | September |  |  |
| Topic: |  |  |  |  |
| Factors, multiples and primes |  |  |  | 3 lessons |
| Content (Intent) |  |  |  |  |
| Prior Learning <br> Year 9 Indices September <br> Year 8 Prime factor form, including HCF and LCM from Venn diagrams September |  |  | Future Learning <br> Year 10 Fractions December |  |
| Objectives <br> - Identify factors, multiples and prime numbers and find the prime factor decomposition of positive integers - write as a product using index notation; <br> - Find the LCM and HCF of two (or more) numbers by listing or prime factor form and Venn diagrams <br> - Solve problems using HCF and LCM, and prime numbers |  |  |  |  |
| Pedagogical notes (implementation) |  |  | How will understanding be assessed \& recorded (Impact) |  |
| Use a number square to find primes (Eratosthenes sieve). <br> Using a calculator to check the factors of large numbers can be useful. Students need to be encouraged to learn squares from $2 \times 2$ to $15 \times 15$ and cubes of $2,3,4,5$ and 10 , and corresponding square and cube roots. Students should understand that the prime factor decomposition of a positive integer is unique, whichever factor pair you start with, and that every number can be written as a product of prime factors |  |  | End of ha in Oct End of Yea $\square$ How can home? <br> MathsWat (Qualificat 28, 78, 79, <br> 127a, 127b | If term Assessment <br> ar Mocks in April <br> parents help at <br> atch clips <br> ation GCSE) <br> , 80, 94 <br> b |
| Further reading/discussion |  |  |  |  |
| Reading / Enrichment | Literacy | Num Links |  | Careers Links Internet security Computing Cryptology |

