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**Maths Fact Fluency Progression Map KS2**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
| Year 3 | Recap 5,10 and 2x tables | 4 x table  8 x table | * Addition and subtraction of multiples of 10 where the answer is between 0 and 100,   e.g. 70 +30 = 100  20 + 40 = 60   * Doubles and halves of multiples of 10 to 100 e.g. double 60 = 120 * Multiplying two-digit numbers by 10, (e.g. 24 x 10 = 240 | 3 x table | 6 x table | Consolidate based on needs of class |
| Year 4 | Revisit 3, 6, 4   * Addition and subtraction of multiples of 10 (e.g. 70 + 30 = 100, 50 + 60 = 110, 20 + 40 = 60);   Addition and subtraction of multiples of 100 where the answer is 1,000 or less (e.g. 300 + 400 = 700, 400 + 600 = 1,000); | Revisit 8  11 and 12 x table  Teach (2021)  9 x table   * 7 x table * \*\*from 2022 this will be taught in autumn 1 | * Double and halves of multiples of 10 to 100 (e.g. double 60 = 120, half 50 = 25); * Multiplying two-digit numbers by 10 (e.g. 24 x 10 = 240);   **Secure Timetables**   * Halves of any even number to 100 (e.g. half of 22 = 11); * And multiplying any two and three-digit number by 10 and 100 (e.g. 24 x 100 = 2,400) | X tables Dependent upon class needs  Individual targeted practise  In preparation for **MTC**  **Secure Timetables** | X tables Dependent upon class needs  Individual targeted practise  In preparation for **MTC**  **Secure Timetables** | Individual targeted practise  **Secure Timetables** |
| Year 5 | * Addition and subtraction of multiples of 10 (e.g. 70 + 30 = 100, 50 + 60 = 110, 20 + 40 = 60); * Addition and subtraction of multiples of 100 (e.g. 300 + 400 = 700, 400 + 600 = 1,000, 800 + 500 = 1,300); * Addition and subtraction of multiples of 1000 (e.g. 3000 + 4000 = 7000); | * Double and halves of multiples of 10 to 100 (e.g. double 60 = 120, half 50 = 25); * Multiplying two-digit number by 10. (e.g. 24 x 10 = 240); * Halves of any number to 100 (e.g. half of 22 = 11, half of 51 = 25.5); | * Number bonds to 100 (e.g. 27 + \_\_\_ = 100) * Multiplying and dividing any number by 10 and 100 (e.g. 24 x 100 = 2,400, 45 ÷ 100 = 0.45, 3.4 x 10 = 34); | Decimal number bonds – tenths and hundredths | * Squares of all number up to 12; * Cubes of 2,3,4 and 5. | * Related facts * Inverse operations |
| **Secure and maintain fluency in all multiplication tables, and corresponding division facts, through continued practice** | | | | | |
| Year 6 | Dependent upon needs of the class based on end of year 5 assessments and ongoing AFL  **Secure and maintain fluency in all multiplication tables, and corresponding division facts, through continued practice** | | | | | |

**Suggestions for the Teach, Rehearse, Assess stages**

**Teach it**

* Show the concept using manipulatives and pictorial representations
* Show patterns (including using 100 squares, numicon etc)
* Use a counting stick
* Show related facts and scaling, e.g. 4 x 5 = 20, 5 x 4 = 20, 20 ÷ 4 = 5, 20 ÷ 5 = 4, 40 x 5 = 200, 0.4 x 5 = 2 etc
* Missing numbers – very important – identified in NFER assessments as a development area
* [Times-Table-A-Whole-School-Approach.pdf (carmelarchimedesmathshub.org.uk)](https://carmelarchimedesmathshub.org.uk/wp-content/uploads/2018/10/Times-Table-A-Whole-School-Approach.pdf) Pages 7-11

**Rehearse it**

* Songs
* TTRS
* Games both ICT (e.g. Topmarks) and non ICT based.
* Paired multiplication and division cards

**Assess it**

* 99 Club
* Standalone tests, e.g. Math-salamanders.com

Please see the document attached for ideas on how to teach some of the skills and objectives in the progression map.

[Times-Table-A-Whole-School-Approach.pdf (carmelarchimedesmathshub.org.uk)](https://carmelarchimedesmathshub.org.uk/wp-content/uploads/2018/10/Times-Table-A-Whole-School-Approach.pdf)