By the end of this half term, children should know the following facts. The aim is for them to recall these facts instantly.

**To identify prime numbers up to 50.**

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| A prime number is a number with no factors other than itself and one.  The following numbers are prime numbers:  2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47  A composite number is divisible by a number other than 1 or itself.  The following numbers are composite numbers:  4, 6, 8, 9, 10, 12, 14, 15, 16, 18, 20, 22, 24, 25, 26, 27, 28, 30, 32, 34, 35, 36, 38, 39, 40, 42, 44, 45, 46, 48, 49, 50 | **Key Vocabulary**  prime number  composite number  factor  multiple |
| Children should be able to explain how they know that a number is composite.  e.g. 39 is composite because it is a multiple of 3 and 13. | |

**To know the square roots of square numbers up to 15 x 15.**

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| 1² = 1 × 1 = 1  2² = 2 × 2 = 4  3² = 3 × 3 = 9  4² = 4 × 4 = 16  5² = 5 × 5 = 25  6² = 6 × 6 = 36  7² = 7 × 7 = 49  8² = 8 × 8 = 64  9² = 9 × 9 = 81  10² = 10 × 10 = 100  11² = 11 × 11 = 121  12² = 12 × 12 = 144  13² = 13 x 13 = 169  14² = 14 x 14 = 196  15² = 15 x 15 = 225 | √1 = 1  √4 = 2  √9 = 3  √16 = 4  √25 = 5  √36 = 6  √49 = 7  √64 = 8  √81 = 9  √100 = 10  √121 = 11  √144 = 12  *√*169 = 13  *√*196 = 14  *√*225 = 15 | **Key Vocabulary**  What is 5 **squared**?  What is 8 **multiplied by itself**?  What is the **square root of** 196?  Is 81 a **square number**? |
| Children should also be able to recognise whether a number below 150 is a square number or not. | | |

**Top Tips**

The secret to success is practising little and often. Use time wisely. Can you practise these KIRFs while walking to school or during a car journey? If your child is not yet confident with their times tables, you may want to practise this first.

Cycling Squares – At <http://nrich.maths.org/1151> there is a challenge involving square numbers. Can you complete the challenge and then create your own examples?