

Broadmayne First School Knowledge Organiser

Maths Focus

Multiplication and Division

Year 4

Autumn Term 2

Multiplication Vocabulary

multiply

times

groups of / lots of

repeated addition

answer = product

commutativity
(multiplication can be done in any order, eg, $3 \times 7 = 21$ and $7 \times 3 = 21$)

Division Vocabulary

divide

share between

share equally / equal groups of

repeated subtraction

answer = quotient

remainder
(the number that is left after a \div calculation and cannot be shared equally)

Times Tables

Times tables are very useful for many parts of the maths curriculum. They are very important. By the end of Year 4, you should know all times tables up to 12×12 . Times tables can be learnt in this order to make them easier to remember.

2, 5, 10, 3, 4, 8, 6, 7, 9, 11, 12

Practical resources



Place value tokens, Dienes

Using inverse to check

$$60 \times 2 = 120$$

$$120 \div 60 = 2$$

Useful \times and \div websites

<https://ttrockstars.com>

<https://www.topmarks.co.uk/maths-games/hit-the-button>

<http://www.learnyourtables.co.uk/>

Key Knowledge

Multiplication

Bar Modelling Method

$$3 \times 123 = 369$$

$3 \times 100 = 300$ $3 \times 20 = 60$ $3 \times 3 = 9$

Part Whole

$$304 \times 2 = 608$$

$4 \times 2 = 8$ $300 \times 2 = 600$

Formal Method (Expanded Column)

$$\begin{array}{r} \times \quad 5 \quad 1 \quad 2 \\ \quad \quad 1 \quad 6 \\ \quad \quad 8 \quad 0 \\ + \quad 4 \quad 0 \quad 0 \quad 0 \\ \hline 4 \quad 0 \quad 9 \quad 6 \end{array}$$

Division

Formal method (Bus Stop method) with no remainder

$$\begin{array}{r} 2 \overline{) 498} \\ \underline{- 8} \\ 18 \\ \underline{- 16} \\ 20 \\ \underline{- 20} \\ 0 \end{array}$$

Part Whole

$$408 \div 4 = 102$$

Divide 400. Divide 8.

Formal method (Bus Stop method) with remainder

$$\begin{array}{r} 6 \overline{) 1016} \\ \underline{- 6} \\ 40 \\ \underline{- 40} \\ 6 \\ \underline{- 6} \\ 0 \end{array}$$

remainder 4
→ 1 ten
→ 6 ones
→ remainder

