## BODMAS

BODMAS is an acronym or mnemonic used to help pupils remember the correct order to complete mathematical calculations in (this called 'order of operations'). Each letter stands for a mathematical operation, as shown below


| Brackets | $(\quad)$ |
| :--- | :--- |
| Orders/Others | Orders are square roots or indices (sometimes called powers or exponents, <br> square numbers and cube numbers). For example, $2^{3}$ : the little 3 means that you <br> multiply the number 3 times, $2 \times 2 \times 2=8$. A square root is the inverse of a square <br> number, so $\sqrt{ } 25$, the square root of 25, is 5 because $5 \times 5$ or $5^{2}$ equals 25. <br> Division: $\div$ Splitting into equal groups or parts |
| Multiplication: $\mathbf{x}$ | Groups of |
| Addition: + | The total of numbers together |
| Subtraction: - | To take away numbers from other numbers |

When you complete a mathematical number sentence involving several different operations then BODMAS helps you to know which order to complete them in.

- Anything in Brackets should be completed first
- Then the orders
- Then any division or multiplication
- Finally addition or subtraction.

If a calculation involving division and multiplication then complete them as they appear from left to right. This is the same for addition and subtraction; they are completed as they appear from left to right.

## Examples:

| Calculation | Order of completion | Answer |
| :--- | :--- | :--- |
| $\mathbf{3 \times ( \mathbf { 7 - 3 } ) =}$ | Complete the subtraction first because it is in brackets | $3 \times 4=12$ |
| $\mathbf{2 + \mathbf { 3 } ^ { \mathbf { 2 } } =}$ | Complete the power first $3^{2}=3 \times 3=9$ then the addition | $2+9=11$ |
| $\mathbf{3 \times 1 0} \div \mathbf{2}=$ | Multiplication and division have the same level of order so <br> complete from left to right | $\mathbf{3 0 \div 2 = 1 5}$ |
| $\mathbf{6 - 2 + 5 =}$ | Addition and subtraction have the same level of order so <br> complete from left to right | $\mathbf{4 + 5 = 9}$ |
| $\mathbf{3 0 - 2 \times 5 =}$ | Complete the multiplication first and then the subtraction | $\mathbf{3 0 - 1 0 = 2 0}$ |

