



# Numeracy Strategy Guide

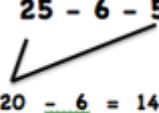
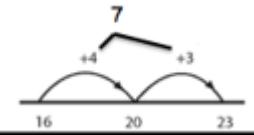


Addition	
Adding in chunks/counting on 	<a href="https://www.youtube.com/watch?v=MfQxuRCqKEQ">https://www.youtube.com/watch?v=MfQxuRCqKEQ</a> <a href="https://www.youtube.com/watch?v=neu8wnlaUUl">https://www.youtube.com/watch?v=neu8wnlaUUl</a> <a href="https://www.youtube.com/watch?v=6AwZO1wS9gl">https://www.youtube.com/watch?v=6AwZO1wS9gl</a>
Reordering 	<a href="https://www.youtube.com/watch?v=mdux-Xn35qE">https://www.youtube.com/watch?v=mdux-Xn35qE</a> <a href="https://www.youtube.com/watch?v=-j8zbHWtOp8">https://www.youtube.com/watch?v=-j8zbHWtOp8</a>
Partitioning/Place Value <b>116 + 127</b> 100 + 100 = 200 10 + 20 = 30 6 + 7 = 13 200 + 30 + 13 = 243	<a href="https://www.youtube.com/watch?v=rboeGFVD9qA">https://www.youtube.com/watch?v=rboeGFVD9qA</a> <a href="https://www.youtube.com/watch?v=MMRCGm44b3M">https://www.youtube.com/watch?v=MMRCGm44b3M</a> <a href="https://www.youtube.com/watch?v=DvXAMlc40qs">https://www.youtube.com/watch?v=DvXAMlc40qs</a>
Making Tens/Bridging through 10 	<a href="https://www.youtube.com/watch?v=x3hIOBCKwL0">https://www.youtube.com/watch?v=x3hIOBCKwL0</a> <a href="https://www.youtube.com/watch?v=SZy2abGiCpQ">https://www.youtube.com/watch?v=SZy2abGiCpQ</a>
Compensation 	<a href="https://www.youtube.com/watch?v=KO_qBYnOPV4">https://www.youtube.com/watch?v=KO_qBYnOPV4</a> <a href="https://www.youtube.com/watch?v=eBO9XCK9w30">https://www.youtube.com/watch?v=eBO9XCK9w30</a>
Doubles/Near Doubles 	<a href="https://www.youtube.com/watch?v=lh4sgwrSB6c">https://www.youtube.com/watch?v=lh4sgwrSB6c</a> <a href="https://www.youtube.com/watch?v=lice0r1z0JI">https://www.youtube.com/watch?v=lice0r1z0JI</a>
Friendly Numbers 	<a href="https://www.youtube.com/watch?v=VSJNODnZZ7o">https://www.youtube.com/watch?v=VSJNODnZZ7o</a> <a href="https://www.youtube.com/watch?v=weg4r6cKmMA">https://www.youtube.com/watch?v=weg4r6cKmMA</a> <a href="https://www.youtube.com/watch?v=II7DDQq35-o">https://www.youtube.com/watch?v=II7DDQq35-o</a>



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Subtraction	
Removal or Counting Back  $123 - 69$ $123 - (20+40+3+6)$ $123 - 20 = 103$ $103 - 40 = 63$ $63 - 3 = 60$ $60 - 6 = 54$	<a href="https://www.youtube.com/watch?v=OSYXMxtzGbA">https://www.youtube.com/watch?v=OSYXMxtzGbA</a> <a href="https://www.youtube.com/watch?v=sgKF7WcFisU">https://www.youtube.com/watch?v=sgKF7WcFisU</a> <a href="https://www.youtube.com/watch?v=AZAJHS30wY0">https://www.youtube.com/watch?v=AZAJHS30wY0</a>
Reordering  $25 - 6 - 5$ 	<a href="https://www.youtube.com/watch?v=yC-iHgVJsjs">https://www.youtube.com/watch?v=yC-iHgVJsjs</a>
Partitioning/Place Value  $367 - 154$ $367 - 100 = 267$ $267 - 50 = 217$ $217 - 4 = 213$  $367 - 100 - 50 - 4 = 213$	<a href="https://www.youtube.com/watch?v=luziiK9SHmQ">https://www.youtube.com/watch?v=luziiK9SHmQ</a> <a href="https://www.youtube.com/watch?v=quiZDDk5gYU">https://www.youtube.com/watch?v=quiZDDk5gYU</a> <a href="https://www.youtube.com/watch?v=BKEALa8e0ek">https://www.youtube.com/watch?v=BKEALa8e0ek</a>
Making Tens/Bridging through 10  $23 - 16$ $16 + 4 = 20$ $20 + 3 = 23$  	<a href="https://www.youtube.com/watch?v=c6YFRilU4vM">https://www.youtube.com/watch?v=c6YFRilU4vM</a> <a href="https://www.youtube.com/watch?v=-HSM3IX2slg">https://www.youtube.com/watch?v=-HSM3IX2slg</a> <a href="https://www.youtube.com/watch?v=47zLTWrzbzuk">https://www.youtube.com/watch?v=47zLTWrzbzuk</a>
Adjusting for Easier Numbers  $123 - 59$ $+1$ $123 - 60 = 63$ $63 + 1 = 64$	<a href="https://www.youtube.com/watch?v=eVARn2rvnS4">https://www.youtube.com/watch?v=eVARn2rvnS4</a> <a href="https://www.youtube.com/watch?v=uinfixqLntU">https://www.youtube.com/watch?v=uinfixqLntU</a>
Keeping a constant difference  $151 - 98$ $(151 + 2) - (98+2)$ $153 - 100 = 53$ $151 - 98 = 53$	<a href="https://www.youtube.com/watch?v=KBSZKnzujSg">https://www.youtube.com/watch?v=KBSZKnzujSg</a> <a href="https://www.youtube.com/watch?v=Z8YCO-9SCdA">https://www.youtube.com/watch?v=Z8YCO-9SCdA</a> <a href="https://www.youtube.com/watch?v=s2sa5FVc9CM">https://www.youtube.com/watch?v=s2sa5FVc9CM</a>



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Multiplication/Division							
Friendly Numbers  $\begin{array}{l} \mathbf{9 \times 15} \\ 10 \times 15 = 150 \\ 150 - 15 = 135 \end{array}$ <p><b>Don't forget to 'undo' your change!</b></p>	<a href="https://www.youtube.com/watch?v=1Cgf4Z8_I1A">https://www.youtube.com/watch?v=1Cgf4Z8_I1A</a>  <a href="https://www.youtube.com/watch?v=OpR_X1rn7O4">https://www.youtube.com/watch?v=OpR_X1rn7O4</a>						
Repeated Addition  $\begin{array}{l} \mathbf{6 \times 15} \\ 15+15+15+15+15+15 \\ 15 + 15 = 30 \\ 30 + 15 = 45 \\ 45 + 15 = 60 \\ 60 + 15 = 75 \\ 75 + 15 = 90 \end{array}$	<a href="https://www.youtube.com/watch?v=Vm_vFDBgL6s">https://www.youtube.com/watch?v=Vm_vFDBgL6s</a>  <a href="https://www.youtube.com/watch?v=MxYsbxLAMts">https://www.youtube.com/watch?v=MxYsbxLAMts</a>  <a href="https://www.youtube.com/watch?v=nedAsB4TT-w">https://www.youtube.com/watch?v=nedAsB4TT-w</a>						
Partial Products  $\begin{array}{l} \mathbf{6 \times 125} \\ 6 \times (100 + 20 + 5) \\ (6 \times 100) + (6 \times 20) + (6 \times 5) \\ 600 + 120 + 30 = 750 \end{array}$	<a href="https://www.youtube.com/watch?v=Nl6lf9XfTg">https://www.youtube.com/watch?v=Nl6lf9XfTg</a>  <a href="https://www.youtube.com/watch?v=chuPfp6Ky_o">https://www.youtube.com/watch?v=chuPfp6Ky_o</a>  <a href="https://www.youtube.com/watch?v=RvZusUgnaP8">https://www.youtube.com/watch?v=RvZusUgnaP8</a>						
Doubling/Halving  $\begin{array}{l} \mathbf{24 \times 8} \\ \begin{array}{r} 24 \\ \times 2 \\ \hline 48 \end{array} \\ \mathbf{48 \times 4} \\ \begin{array}{r} 48 \\ \times 2 \\ \hline 96 \end{array} \\ \mathbf{96 \times 2} \\ \begin{array}{r} 96 \\ \times 2 \\ \hline 192 \end{array} \end{array}$	<a href="https://www.youtube.com/watch?v=kx7dxyhNLv8">https://www.youtube.com/watch?v=kx7dxyhNLv8</a>  <a href="https://www.youtube.com/watch?v=M0fiMSXUu64">https://www.youtube.com/watch?v=M0fiMSXUu64</a>  <a href="https://www.youtube.com/watch?v=PaVA5TM70oE">https://www.youtube.com/watch?v=PaVA5TM70oE</a>						
Breaking Factors into smaller Factors  $\begin{array}{l} \mathbf{12 \times 25} \\ \overbrace{12}^{2 \times 6} \times 25 = 50 \\ 50 \times 6 = 300 \end{array}$	<a href="https://www.youtube.com/watch?v=FiMhpN_jPQw">https://www.youtube.com/watch?v=FiMhpN_jPQw</a>  <a href="https://www.youtube.com/watch?v=uKapSmIBOMQ">https://www.youtube.com/watch?v=uKapSmIBOMQ</a>						
Grid method  $\mathbf{35 \times 7}$ <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>x</td><td>30</td><td>5</td></tr> <tr> <td>7</td><td>210</td><td>35</td></tr> </table> $210 + 35 = 245$	x	30	5	7	210	35	<a href="https://www.youtube.com/watch?v=a3duqrhE8Xw">https://www.youtube.com/watch?v=a3duqrhE8Xw</a>  <a href="https://www.youtube.com/watch?v=LTxql8_dXec">https://www.youtube.com/watch?v=LTxql8_dXec</a>
x	30	5					
7	210	35					



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Multiplication/Division	
Partial Quotients  8 x 5 = 40 8 x 4 = 32 (5 + 4) = (40 + 32) 8 x 9 = 72	<a href="https://www.youtube.com/watch?v=F0vb5hyzA_Q">https://www.youtube.com/watch?v=F0vb5hyzA_Q</a> <a href="https://www.youtube.com/watch?v=Ug3NM2i7IVc">https://www.youtube.com/watch?v=Ug3NM2i7IVc</a>
Multiplying Up <b>72 ÷ 8</b> 8 x 5 = 40 8 x 4 = 32 (5 + 4) = (40 + 32) 8 x 9 = 72	<a href="https://www.youtube.com/watch?v=VQpV2pLmJhw">https://www.youtube.com/watch?v=VQpV2pLmJhw</a> <a href="https://www.youtube.com/watch?v=TWxV8hikMYA">https://www.youtube.com/watch?v=TWxV8hikMYA</a> <a href="https://www.youtube.com/watch?v=5bc_2x2va-8">https://www.youtube.com/watch?v=5bc_2x2va-8</a>
Repeated Subtraction <b>24 ÷ 6</b> 24 - 6 - 6 - 6 - 6 <b>6 x 4 = 24 so 24 ÷ 6 = 4</b>	<a href="https://www.youtube.com/watch?v=xBlingXK188">https://www.youtube.com/watch?v=xBlingXK188</a> <a href="https://www.youtube.com/watch?v=1Vg27Q1dZFc">https://www.youtube.com/watch?v=1Vg27Q1dZFc</a>
Division using Numicon  20 ÷ 3 = 6r2 20 ÷ 5 = 4 20 ÷ 8 = 2r4 20 ÷ 7 = 2r6	<a href="https://www.youtube.com/watch?v=dRX7XCGmRRo">https://www.youtube.com/watch?v=dRX7XCGmRRo</a> <a href="https://www.youtube.com/watch?v=GGzeDIG-u2o">https://www.youtube.com/watch?v=GGzeDIG-u2o</a> <a href="https://www.youtube.com/watch?v=IUBWpzQ6eHo">https://www.youtube.com/watch?v=IUBWpzQ6eHo</a>