

The on-line versions of **Wee Red Box** flashcards bring all the benefits of the original and acclaimed plastic versions, and more besides. They are automatically marked with feedback given, and, have pass marks of 20/20 in order to gain a 'Well Done' award. Fluency can then be improved by doing that bundle faster, with the website also timing the user. This promotes good 'working memory' and better 'processing speed', then, being mentally fluent = good at numeracy = better at maths, and why these well proven techniques can be so beneficial. Getting 'Well Done' awards at fourth level is actually a very good numeracy performance (and heavily dependent on the quality of attainment at previous levels). Numeracy, let's get excellent.

### 'starting' Cfe first level (mainly P2)

- + within 10 eg 4+3, 2+6, 3+4, 6+4, ...
- - within 10 eg 6-3, 10-4, 10-6, 8-5, ...
- + or - within 10 eg 4+3, 7-3, 2+6, 8-6, ...

### 'towards' Cfe first level (mainly P3)

- + within 20 eg 6+7, 8+8, 7+6, 9+4, ...
- - within 20 eg 13-6, 16-8, 14-9, 11-7, ...
- + within 100 eg 48+2, 76+2, 29+10, 38+30, ...
- - within 100 eg 50-2, 86-4, 66-10, 83-20, ...
- x or ÷ by 2 eg 6x2, 12÷2, 9x2, 18÷2, ...
- x or ÷ by 5 eg 6x5, 30÷5, 9x5, 45÷5, ...
- x or ÷ by 10 eg 6x10, 60÷10, 9x10, 90÷10, ...

### 'starting' Cfe second level (mainly P5)

- + or - eg 496+6, 878+8, 320-8, 455-50, ...
- x or ÷ by 6 eg 6x6, 36÷6, 9x6, 54÷6, ...
- x or ÷ by 7 eg 6x7, 42÷7, 9x7, 63÷7, ...
- 'towards' Cfe second level (mainly P6)
- + two digits eg 44+19, 235+25, 66+53, ...
- - two digits eg 84-19, 250-25, 120-23, ...
- x or ÷ by 8 eg 6x8, 48÷8, 9x8, 72÷8, ...
- x or ÷ by 9 eg 6x9, 54÷9, 9x9, 81÷9, ...
- x or ÷ with all the tables eg 6x7, 56÷8, 7x9, ...
- ÷ with remainders eg 44÷7, 50÷8, 35÷4, ...
- fractions eg 1/3 of 18, 1/5 of 40, 1/10 of 70, 1/2 of 150, ...

### AT Curriculum for Excellence THIRD LEVEL (mainly S1/2)

- + decimals eg 0.2+1.15, 3.1+1.22, 2.35+0.56, ...
- - decimals eg 5-0.3, 2.75-0.3, 2.65-0.24, ...
- + or - integers eg 8+(-17), 3-(-6), (-5)-(-3), ...
- order of calculation eg (12+8)÷2, 3(7-2)÷5, ...
- + eg 2.4+0.15, 1257+35, (-2)+(-6), ...
- - eg 2.55-0.3, 2832-29, 8-(-6), ...
- x decimals eg 1.8x3, 0.045x10, 5.5x5, ...
- ÷ decimals eg 4.2÷6, 7.45÷100, 2.5÷5, ...
- x or ÷ integers eg 5x(-6), (-4)x(-3), 45÷(-9), ...
- x eg 355x2, 4x(-7), 90x300, 4.8x2, ...

### AT Curriculum for Excellence FOURTH LEVEL (mainly S2/3)

- + or - decimals eg 5.779+0.003, 7.555-0.4, ...
- +, -, x, ÷ integers eg (-3)-(-4)+(-5), (-3)-(-4)x(-5), (-4)<sup>3</sup>
- + or - eg 5.28-0.9, 1624+79, -4-(-6)-3, ...
- x or ÷ whole numbers eg 220x6, 21000÷70, 36x7, ...
- scientific notation eg 3.5x10<sup>7</sup>, 7.2x10<sup>-4</sup>, (2.5x10<sup>3</sup>)x(2x10<sup>4</sup>)
- x decimals eg 0.6x70, 1.8x20, 0.99x8, ...
- ÷ decimals eg 86÷20, 3.74÷2, 9÷6, ...
- x or ÷ eg 0.99x6, 7.35÷7, 0.8x40, ...
- order of calculation eg 2((7+2)-5), 6x4-5x5, ...
- evaluate formulae 1 eg B<sup>2</sup> + H<sup>2</sup> or (B+H)<sup>2</sup> or H<sup>3</sup>, ...

### AT Cfe FIRST LEVEL (mainly P4)

- + or - within 20 eg 9+8, 17-9, 8+7, 15-8, ...
- + or - within 100 eg 39+8, 57-9, 28+7, 65-8, ...
- + within 1000 eg 435+5, 264+10, 437+100, ...
- - within 1000 eg 419-3, 175-10, 318-100, ...
- x or ÷ by 3 eg 6x3, 18÷3, 9x3, 27÷3, ...
- x or ÷ by 4 eg 6x4, 24÷4, 9x4, 36÷4, ...
- x or ÷ by 2, 3, 4, 5 or 10 eg 6x2, 15÷3, 7x4, ...
- find 1/2 or 1/4 eg 1/2 of 12, 1/2 of 16, 1/4 of 28, ...
- patterns eg 62, 60, 58, .. or, 97, 98, 99, ...
- ASSESSMENT practice skills at first level

### AT Cfe SECOND LEVEL (mainly P7)

- + or - eg 5.6+4, 7.2-3, 111-33, 785+39, ...
- order of calculation eg 2+4x3, 20-12÷2, ...
- + negative numbers eg 4 + (-6), -5 + (-4), ...
- x or ÷ by 10 or 100 eg 413÷10, 2.55x10, ...
- x two digits eg 25x7, 15x8, 44x3, ...
- ÷ two or three digits eg 220÷4, 560÷8, 135÷9 ...
- fractions eg 2/3 of 18, 3/4 of 28, 3/5 of 40, ...
- percentages eg 50% of 1.4L, 25% of 28kg, ...
- patterns eg 620, 605, 590, .. or 9.7, 9.8, 9.9, ..
- ASSESSMENT practice skills at second level

- ÷ eg 3000÷60, 42÷(-7), 600÷8, 3.2÷4, ...
- evaluate formulae eg 4(A+B), A-B, 3AB, ...
- fractions 1 eg 1/20 of 80, 1/25 of 200, 1/2 of 1.5,
- fractions 2 eg 3/8 of 72, 5/9 of 54, 3/4 of 320, ...
- + or - fractions eg 8 - 2 1/2, 1 - 1/4, 3/7 + 2/7, ...
- percentages eg 40% of 60m, 75% of 36L, ...
- + or - percentages eg 40m+10%, 36L-25%, ...
- powers and roots eg 8<sup>2</sup>, √49, 5x5x5, 2x2x2x2,
- patterns eg 2400, 2373, 2346, or 0.25, 0.5, 0.75
- ASSESSMENT practice skills at third level

- evaluate formulae 2 eg (Y-Z)<sup>3</sup>, (Z-Y)<sup>2</sup>, X+YZ,
- fractions 1 eg 1/2 of 5.7, 1/25 of 350, 1/3 of 1.14,
- fractions 2 eg 3/5 of 90, 11/20 of 60, 3/4 of 5
- + or - fractions eg 1-11/15, 4/7+4/7, 1 1/2 - 3/4
- x or ÷ fractions eg 4/5 x 1/7, 2 1/2 ÷ 1/2, 2 ÷ 3/4
- percentages eg 75% of 140L, 5% of 24m, ...
- + or - percentages eg 35m-10%, 3.5L+20%, ..
- powers and roots eg 17<sup>2</sup>, √400, 7<sup>3</sup>, <sup>3</sup>√343, ...
- patterns eg -22, -15, -8, -1, ... or 1, 8, 27, 64, ..
- ASSESSMENT practice skills at fourth level