Unit 2. Place Value

National Curriculum Requirement

Recognise the place value of each digit in a two-digit number (tens, ones)

Notes

The place value of a number is something that is often only properly understood until a familiarity with numbers has been gained and it may be that pupils struggle with the concept. And given the demands of the NC, to avoid mistakes, it may be that pupils need to apply a template type format to their layout of calculations using T (tens) and U (units) headings.

If pupils are to progress with their arithmetic, they need to layout their working in columns. In this respect, probably, the main mistake which needs to guarded against is that of aligning the the 'units' with the 'tens'. This is a common mistake which is often made into KS3 by those students that find mathematics challenging.

The work that follows need to be discussed with pupils and the fact that numbers derive an ascending size from the right can be illustrated with Dienes' blocks.

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What does the T and U represent above the number twelve (12)?

	T	U	
	1	2	

Write down the value of the highlighted digit (number) in each of the numbers below. The first one has been done for you.

2 3 (Twenty-three)

The 3 digit has a value of 3 units

3 7 (Thirty-seven)

The 7 digit has a value of _____

2 4 (Twenty-four)

The 2 digit has a value of _____

5 2 (Fifty-six)

The 5 digit has a value of _____

3 6 (Fifty-six)

The 6 digit has a value of _____

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If you try to add together 32 and 5, why will you get the wrong answer if you write the sum down like this:

$$\begin{array}{r} 3\ 2 \\ +\ 5\ \ \\ \hline \\ \hline \end{array}$$

Put a tick against any the add up sum that has been written down correctly and a cross against the one which has been written down incorrectly

To add fifty-two and three we write:

$$\begin{array}{r} 5\ 2 \\ +\ \ 3 \\ \hline \\ \hline \end{array}$$

To add seventy-one and two we write:

$$\begin{array}{r} 7\ 1 \\ +\ 2\ \ \\ \hline \\ \hline \end{array}$$

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