## Spring Test 5

## Teacher guidance

## Skills and knowledge needed for this test:

- Addition of three single-digit numbers
- Addition and subtraction of multiples of 10
- Addition and subtraction of a two-digit or a three-digit number and a single-digit number with and without crossing a ten
- Addition and subtraction of a two-digit or a three-digit number and a multiple of 10 or 100
- Addition and subtraction of two two-digit numbers with and without crossing a ten
- Missing number statements with all four operations
- Multiplication and division by 10, 5, 2, 3 and 4
- Derivatives of multiplication and division by $10,5,2,3$ and 4
- Finding a half, a third, a quarter, two quarters or three quarters of an amount


## New: Formal written method for short multiplication

## A teaching suggestion



Display $24 \times 3$. Start by partitioning 24 into 20 and 4.

Multiply $3 \times 20$ and $3 \times 4$, giving 60 and 12 , and then add these to give 72 .

Explain that there is a quicker way to do this. Display:24

$$
\times \underline{3}
$$

Emphasise that the digit 2 still represents 20 , but that the 0 is hidden behind the 4 .

Step 5 Explain that we work with the ones column first: $3 \times 4$ is 12 , so we write the 12 putting the 1 in the tens column and the 2 in the ones column (so it still reads as 12).

$$
\begin{array}{r}
24 \\
\times \quad 3 \\
\hline 2 \\
\hline 1
\end{array}
$$

6 Next multiply the tens by $3(2 \times 3)$, giving 6 tens. Then add the extra one, giving 7 tens. Write the answer 72.

Step 7 Do lots of examples with the children, let them work in pairs and, when they are confident, independently.

| Question number | Question | Answer | Marks | Related test |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $4+11=\square$ | 15 | 1 | Y1 Summer Test 1 |
| 2 | $21+16=\square$ | 37 | 1 | Y3 Autumn Test 2 |
| 3 | $\square-5=8$ | 13 | 1 | Y3 Autumn Test 1, Y1 Summer Test 1 |
| 4 | $24 \div 3=\square$ | 8 | 1 | Y3 Spring Test 1 |
| 5 | $\square=\frac{1}{3}$ of 15 | 5 | 1 | Y2 Summer Test 5 |
| 6 | $45+39=\square$ | 84 | 1 | Y3 Autumn Test 2 |
| 7 | $375+4=\square$ | 379 | 1 | Y3 Autumn Test 6 |
| 8 | $27+\square=68$ | 41 | 1 | Y3 Autumn Test 1, Y3 Autumn Test 3 |
| 9 | $\square \times 4=24$ | 6 | 1 | Y3 Autumn Test 5, Y3 Spring Test 4 |
| 10 | $\square=641-300$ | 341 | 1 | Y3 Spring Test 3 |
| 11 | $120 \div \square=40$ | 3 | 1 | Y3 Autumn Test 5, Y3 Spring Test 2 |
| 12 | $63-25=\square$ | 38 | 1 | Y3 Autumn Test 3 |
| 13 | $\frac{3}{4}$ of $8=\square$ | 6 | 1 | Y3 Autumn Test 4 |
| 14 | $\square=4 \times 80$ | 320 | 1 | Y3 Spring Test 2, Y3 Spring Test 4 |
| 15 | $91-63=\square$ | 28 | 1 | Y3 Autumn Test 3 |
| 16 | $27 \times 3=\square$ | 81 | 1 | Y3 Spring Test 1, Y3 Spring Test 5 |
| 17 | $36+\square=82$ | 46 | 1 | Y3 Autumn Test 1, Y3 Autumn Test 3 |
| 18 | $16 \times 5=\square$ | 80 | 1 | Y3 Spring Test 5, Y2 Spring Test 5 |
| Total marks |  |  | 18 |  |

