Autumn Test 1

Teacher guidance

Skills and knowledge needed for this test:

- Addition and subtraction of two numbers with more than four digits
- Addition and subtraction of fractions with the same denominator
- Complements of 1
- Square and cube numbers
- Multiplication and division of whole numbers and decimals by 10, 100 and 1000
- Formal written method for short multiplication and short division with remainders
- Missing number calculations with all four operations

Review: Formal written method for long multiplication of up to three digits by a two-digit number

A teaching suggestion

Step 1 Display:

$$\begin{array}{r} 478 \\ \times\ 56 \\ \hline \end{array}$$

Explain that the children are going to recap the formal method for long multiplication which is like doing three calculations but only having to write one!

Step 2 Demonstrate that you start by multiplying the top number by the ones in the bottom number for the first calculation, so $6 \times 478 = 2868$.

$$\begin{array}{r} 478 \\ \times\ 56 \\ \hline 2868 \\ {\scriptstyle 4\ 4} \end{array}$$

Step 3 Explain that the second calculation involves multiplying the top number by the tens in the second number and so the answer ends with a zero. Emphasise that you are multiplying by 50 (not 5), so $478 \times 50 = 23\,900$.

$$\begin{array}{r} 478 \\ \times\ 56 \\ \hline 2868 \\ 23900 \\ {\scriptstyle 3\ 4} \end{array}$$

Step 4 Finally, demonstrate the third calculation where the answers to the other two parts are added together, so $2868 + 23\,900 = 26\,768$.

$$\begin{array}{r} 478 \\ \times\ 56 \\ \hline 2868 \\ +\ 23900 \\ \hline 26768 \\ {\scriptstyle 1} \end{array}$$

Step 5 Work through lots of examples with the children, and then encourage them to work with a partner before trying similar calculations independently.

Question number	Question	Answer	Marks	Related test
1	$1 \times 0 = \square$	0	1	Y4 Autumn Test 4
2	$\square = 1 - 0.2$	0.8	1	Y5 Summer Test 4
3	$143 \div 1 = \square$	143	1	Y4 Autumn Test 6
4	$1200 \times 5 = \square$	6000	1	Y4 Summer Test 5
5	$8^2 = \square$	64	1	Y5 Autumn Test 4
6	$206 \times 1 = \square$	206	1	Y4 Autumn Test 6
7	$3^2 = \square$	9	1	Y5 Autumn Test 4
8	$\square = 1^3$	1	1	Y5 Spring Test 1
9	$\frac{1}{6} + \frac{1}{3} = \square$	$\frac{3}{6}$ (or equiv)	1	Y5 Spring Test 6
10	$51 \times 1000 = \square$	51 000	1	Y5 Autumn Test 5
11	$30 = \square \times 5$	6	1	Y4 Autumn Test 3
12	$\square = 7.3 \times 10$	73	1	Y5 Spring Test 2
13	$3900 \div \square = 39$	100	1	Y5 Autumn Test 5, Y4 Autumn Test 3
14	$7 = 56 \div \square$	8	1	Y4 Autumn Test 3
15	$28.4 \div 10 = \square$	2.84	1	Y5 Spring Test 2
16	$603 - 247 = \square$	356	1	Y5 Autumn Test 3
17	$7529 \div 2 = \square$	3764 r1	1	Y5 Autumn Test 6
18	$7152 \times 5 = \square$	35 760	1	Y5 Spring Test 3
19	$5396 \div 4 = \square$	1349	1	Y5 Spring Test 5
20	$342 \times 21 = \square$	7182	2*	Y6 Autumn Test 1
21	$\square + 4293 = 7142$	2849	1	Y4 Spring Test 3, Y3 Autumn Test 1
22	$6258 = 7 \times \square$	894	1	Y5 Spring Test 5, Y4 Autumn Test 3
23	$\square \div 9 = 235$	2115	1	Y5 Spring Test 3, Y4 Autumn Test 3
24	$638 + 9 + 72\,364 = \square$	73 011	1	Y5 Spring Test 4
25	$322 \times 31 = \square$	9982	2*	Y6 Autumn Test 1
26	$314 = 700 - \square$	386	1	Y5 Autumn Test 3, Y3 Autumn Test 1
27	$426 \times 83 = \square$	35 358	2*	Y6 Autumn Test 1
	Total marks		**30**	

* award 1 mark if there is one error in the working