Autumn Test 3

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 multiples of 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
- Formal written method for long multiplication of up to three digits by a two-digit number
- Missing number calculations with all four operations

Review: Finding fractions of amounts

A teaching suggestion

Step 1 Show the children a circle and tell them you are going to cut or colour five sixths of the circle. Demonstrate how to start by dividing the circle into sixths, and then cut or colour five of the sixths.

Step 2 Repeat with other fractions (e.g. seven tenths).

Step 3 When the children are confident, use a number instead of a shape. To find five sixths of 54, start by dividing 54 into sixths: $54 \div 6 = 9$, so each sixth is worth 9 and we want five of them. Since $9 \times 5 = 45$, five sixths of 54 is 45.

Step 4 Work through lots of examples together until the children understand the process.

Step 5 Introduce the chant: 'Divide by the bottom and times by the top!'. This is a good process aid to use once the children fully understand what is happening in the calculation.

Step 6 Complete lots of examples with the children. Let them work with a partner before trying the work independently.

Question number	Question	Answer	Marks	Related test
1	$59 \times 1 = \square$	59	1	Y4 Autumn Test 6
2	$1 = \square + 0.3$	0.7	1	Y5 Summer Test 4
3	$10^2 = \square$	100	1	Y5 Autumn Test 4
4	$700 \times 4 = \square$	2800	1	Y4 Summer Test 5
5	$\square^2 = 81$	9	1	Y5 Autumn Test 4
6	$50 \times 100 = \square$	5000	1	Y5 Autumn Test 5
7	$\frac{15}{5} - \frac{3}{5} = \square$	$2\frac{2}{5}$ (or equiv)	1	Y6 Autumn Test 2
8	$\square \div 9 = 6$	54	1	Y4 Autumn Test 3, Y4 Spring Tests 2 and 4
9	$\frac{6}{10} + \frac{2}{5} = \square$	1 (or equiv)	1	Y5 Spring Test 6
10	$640 = 6400 \div \square$	10	1	Y5 Autumn Test 5, Y4 Autumn Test 3
11	$\frac{2}{5}$ of $25 = \square$	10	1	Y6 Autumn Test 3
12	$\square = 5^3$	125	1	Y5 Spring Test 1
13	$13.4 \div 100 = \square$	0.134	1	Y5 Spring Test 2
14	$4016 - 1238 = \square$	2778	1	Y5 Autumn Test 3
15	$\frac{2}{5} + \frac{7}{10} = \square$	$1\frac{1}{10}$ (or equiv)	1	Y6 Autumn Test 2
16	$\square = 68.2 \times 1000$	68 200	1	Y5 Spring Test 2
17	$\frac{5}{7}$ of $14 = \square$	10	1	Y6 Autumn Test 3
18	$8 \times \square = 240$	30	1	Y4 Autumn Test 3, Y3 Spring Test 2
19	$4368 \div 6 = \square$	728	1	Y5 Spring Test 5
20	$\frac{3}{10}$ of $50 = \square$	15	1	Y6 Autumn Test 3
21	$605 - \square = 319$	286	1	Y5 Autumn Test 3, Y3 Autumn Test 1
22	$378 \times 25 = \square$	9450	2*	Y6 Autumn Test 1
23	$6925 \times 4 = \square$	27 700	1	Y5 Spring Test 3
24	$7518 \div 9 = \square$	835 r3	1	Y5 Autumn Test 6
25	$2690 = \square \times 5$	538	1	Y5 Spring Test 5, Y4 Autumn Test 3
26	$\square = 986\,173 - 76\,328$	909 845	1	Y5 Spring Test 4
27	$\square \div 3 = 2463$	7389	1	Y5 Spring Test 3, Y4 Autumn Test 3
28	$796 \times 68 = \square$	54 128	2*	Y6 Autumn Test 1
	Total marks		**30**	

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