Spring Test 2

Teacher guidance

28 minutes

Skills and knowledge needed for this test:

- Addition and subtraction of two numbers up to four digits
- Addition and subtraction of fractions with the same denominator
- Multiplication and division to 12 × 12 including derivatives of multiples of 100
- Multiplication of three numbers
- Multiplication by 0; multiplication and division by 1; square numbers
- Formal written method for short multiplication (to HTO) and short division (to TO), including with remainders
- Multiplication and division of whole numbers by 10, 100 or 1000
- Missing number statements with all four operations

New: Multiplication and division of decimals by 10, 100 or 1000

A teaching suggestion

Step 1 Use a fixed decimal point and digit cards that can be moved to illustrate the method.

Step 2 When multiplying by 10, 100 and 1000, the digits in the number move left to give an answer that is bigger than the original number. When dividing by 10, 100 and 1000, the digits in the number move right to give an answer that is smaller than the original number.

Step 3 Display 4.56 × 1000. Establish that the number will become 1000 times bigger. This means that the digits in the number move three columns to the left.
Move 1 = 45.6
Move 2 = 456.
Move 3 = 456__. so the empty space is filled with a zero giving 4560.
which is shown as

Th	H	T	O	.	t	h			Th	H	T	O	.	t	h
			4	.	5	6	becomes			4	5	6	0		

Step 4 Display 8.3 ÷ 100. Establish that there are two moves and the division sign means the digits move to the right to make the number smaller.
Move 1 = 0.83
Move 2 = 0.083 which is shown as

Th	H	T	O	.	th			Th	H	T	O	.	t	h	th
			8	.	3	becomes					0	.	0	8	3

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

Question number	Question	Answer	Marks	Related test
1	$0 \times 6 = \square$	0	1	Y4 Autumn Test 4
2	$\square = 13 \times 1$	13	1	Y4 Autumn Test 6
3	$32 \times 10 = \square$	320	1	Y5 Autumn Test 5
4	$4 \div 10 = \square$	0.4	1	Y5 Autumn Test 5
5	$7 \times \square = 21$	3	1	Y4 Autumn Test 3, Y4 Spring Test 6
6	$\frac{10}{4} - \frac{6}{4} = \square$	1 (or equiv)	1	Y5 Autumn Test 2
7	$100 \div 1 = \square$	100	1	Y4 Autumn Test 6
8	$315 + 486 = \square$	801	1	Y4 Spring Test 1
9	$\square \times 400 = 1600$	4	1	Y4 Autumn Test 3, Y4 Summer Test 5
10	$\square = 7139 - 2436$	4703	1	Y4 Spring Test 3
11	$6^2 = \square$	36	1	Y5 Autumn Test 4
12	$73 \times 1000 = \square$	73 000	1	Y5 Autumn Test 5
13	$900 - 702 = \square$	198	1	Y5 Autumn Test 3
14	$365 \times 8 = \square$	2920	1	Y4 Summer Test 1
15	$\square = 2700 \div 3$	900	1	Y4 Summer Test 5
16	$7873 + 1948 = \square$	9821	1	Y4 Spring Test 1
17	$75 \div 2 = \square$	37 r1	1	Y5 Autumn Test 6
18	$\frac{4}{7} + \frac{6}{7} = \square$	$1\frac{3}{7}$ (or equiv)	1	Y5 Autumn Test 2
19	$730 = \square \times 5$	146	1	Y4 Autumn Test 2, Y4 Autumn Test 3
20	$21 \times 5 \times 8 = \square$	840	1	Y4 Summer Test 3
21	$3^3 = \square$	27	1	Y5 Spring Test 1
22	$9621 - \square = 3288$	6333	1	Y4 Spring Test 3, Y3 Autumn Test 1
23	$6.1 \times 100 = \square$	610	1	Y5 Spring Test 2
24	$94 \div 7 = \square$	13 r3	1	Y5 Autumn Test 6
25	$\square = 8^2$	64	1	Y5 Autumn Test 4
26	$9 = 198 \div \square$	22	1	Y4 Autumn Test 2, Y4 Autumn Test 3
27	$4004 - 1265 = \square$	2739	1	Y5 Autumn Test 3
28	$26.3 \div 100 = \square$	0.263	1	Y5 Spring Test 2
		Total marks	**28**	