Spring Test 6

Teacher guidance

(28 minutes)

Skills and knowledge needed for this test:

- Addition and subtraction of two numbers with different numbers of 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 and cube numbers
- Short multiplication of up to four digits by a single-digit number
- Short division of a four-digit number by a single-digit number, including with remainders
- Multiplication and division of whole numbers or decimals by 10, 100 or 1000
- Missing number statements with all four operations

New: Addition and subtraction of fractions with multiples of the same denominator

A teaching suggestion

Step 1 Cut one circle into fifths and another into tenths. Compare the segments, demonstrating that two tenths are the same as one fifth, four tenths are the same as two fifths and so on.

Step 2 Hold up fifth fractions and, on an agreed signal, ask the children to call out how many tenths they represent.

Step 3 When the children are confident, display:

$$\frac{3}{5} + \frac{1}{10} =$$

Step 4 Hold three fifths in one hand and one tenth in the other. Discuss the problem of adding them (they are not the same). Give the children an opportunity to discuss how to solve the problem. Agree that the three fifths can be changed for six tenths.

$$\frac{3}{5} + \frac{1}{10} = \frac{6}{10} + \frac{1}{10} =$$

Step 5 The tenths are now straightforward to add, giving $\frac{7}{10}$.

Step 6 Together, repeat lots of addition and subtraction examples using $\frac{1}{3}$ and $\frac{1}{6}$, $\frac{1}{4}$ and $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{1}{8}$ and so on. Allow the children to work with a partner before working independently.

Question number	Question	Answer	Marks	Related test
1	$2 \times 7 = \square$	14	1	Y4 Spring Test 6
2	$\square \div 5 = 11$	55	1	Y4 Autumn Test 3, Y4 Autumn Test 5
3	$23 \times 100 = \square$	2300	1	Y5 Autumn Test 5
4	$\square = 713 - 305$	408	1	Y4 Spring Test 3
5	$20 \times 1 = \square$	20	1	Y4 Autumn Test 6
6	$2^3 = \square$	8	1	Y5 Spring Test 1
7	$\square = 0 \times 70$	0	1	Y4 Autumn Test 4
8	$\frac{12}{8} - \frac{2}{8} = \square$	$1\frac{2}{8}$ (or equiv)	1	Y5 Autumn Test 2
9	$78 + 284 = \square$	362	1	Y5 Spring Test 4
10	$348 = \square + 176$	172	1	Y4 Spring Test 1, Y3 Autumn Test 1
11	$6142 \times 3 = \square$	18 426	1	Y5 Spring Test 3
12	$58 \div 3 = \square$	19 r1	1	Y5 Autumn Test 6
13	$\frac{1}{3} + \frac{1}{6} = \square$	$\frac{3}{6}$ (or equiv)	1	Y5 Spring Test 6
14	$\square = 7^2$	49	1	Y5 Autumn Test 4
15	$1364 - 58 = \square$	1306	1	Y5 Spring Test 4
16	$4 \times 37 \times 5 = \square$	740	1	Y4 Summer Test 3
17	$\square = 6004 - 2151$	3853	1	Y5 Autumn Test 3
18	$4122 \div 3 = \square$	1374	1	Y5 Spring Test 5
19	$600 \times 9 = \square$	5400	1	Y4 Spring Test 4, Y4 Summer Test 5
20	$\frac{4}{5} - \frac{1}{10} = \square$	$\frac{7}{10}$ (or equiv)	1	Y5 Spring Test 6
21	$93 \div 6 = \square$	15 r3	1	Y5 Autumn Test 6
22	$5 = 1745 \div \square$	349	1	Y5 Spring Test 5, Y4 Autumn Test 3
23	$7.29 \div 10 = \square$	0.729	1	Y5 Spring Test 2
24	$\square - 169 = 651$	820	1	Y4 Spring Test 1, Y3 Autumn Test 1
25	$2773 \times 8 = \square$	22 184	1	Y5 Spring Test 3
26	$\square = 7319 + 6 + 287$	7612	1	Y5 Spring Test 4
27	$6824 \div 8 = \square$	853	1	Y5 Spring Test 5
28	$\frac{1}{4} + \frac{5}{12} = \square$	$\frac{8}{12}$ (or equiv)	1	Y5 Spring Test 6
		Total marks	**28**	