

Spring Test 2

Teacher guidance



Skills and knowledge covered in this test:

- Count from 0 in multiples of 4, 8, 50 and 100 [3N1b]
- Find 10 or 100 more or less than a given number [3N2b]
- Add and subtract mentally [3C1]
- Add and subtract using formal written methods of columnar addition and subtraction [3C2]
- Solve addition and subtraction problems including missing numbers [3C4]
- Recall multiplication and division facts for the 3, 4 and 8 multiplication tables [3C6]
- Calculate multiplication and division statements mentally and using formal written methods [3C7]
- Solve multiplication and division problems including missing numbers [3C8]
- Count up and down in tenths [3F1a]
- Find fractions of a discrete set of objects [3F1b]
- Add and subtract fractions with the same denominator [3F4]

Focus activity: Partitioning multipliers

3C6, 3C7

You will need: counters.

Step 1 Introduce the language of multiplication, multiplicand \times multiplier = product and division, dividend \div divisor = quotient. Display the vocabulary alongside sample calculations and refer to it frequently.

Step 2 Display the following set of calculations:

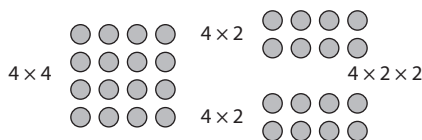
$$4 \times 4 \qquad 4 \times 2 \times 2$$

$$3 \times 8 \qquad 3 \times 4 \times 2$$

$$4 \times 10 \qquad 4 \times 5 \times 2$$

Step 3 Ask children what they notice. On each row, the multiplicand and product stay the same but the multiplier has been partitioned into two parts. It does not matter how we group the quantities when we multiply (or add). This is the associative law. Tell children that it is good to know about the associative law as sometimes we can make calculations easier to do by partitioning them in different ways.

Step 4 Challenge children to use counters to create arrays for both calculations on the same row to help them explain what is happening.



Step 5 Ask children to say which group of counters is easier to count. Agree that by partitioning the multiplier it is easier to see what the product is by using addition to add the two groups of counters.

Qu. No.	Question	Answer	Mark	Domain ref.	Focus activity
1	$9 + 4 = \square$	13	1	1C1	Y1 Summer Test 2, Y1 Summer Test 4
2	$9 - \square = 5$	4	1	1C4	Y1 Spring Test 1, Y1 Spring Test 5, Y1 Summer Test 4, Y1 Summer Test 6
3	$13 - 6 = \square$	7	1	2C1	Y1 Summer Test 3, Y1 Summer Test 4
4	$9 \times 2 = \square$	18	1	2C6	Y2 Spring Test 1, Y2 Spring Test 2
5	$20 + 10 + 10 = \square$	40	1	2N1	Y2 Autumn Test 5
6	$\square = 24 - 7$	17	1	2C2a, 2C2b	Y2 Autumn Test 2
7	$58 - 10 = \square$	48	1	2C2a, 2C2b	Y2 Autumn Test 5
8	$354 + 10 = \square$	364	1	3N2b	Y3 Autumn Test 3
9	$20 \div 5 = \square$	4	1	2C6	Y2 Spring Test 3, Y2 Spring Test 4, Y2 Spring Test 5, Y2 Spring Test 6
10	$802 - 6 = \square$	796	1	3C1	Y3 Autumn Test 2
11	$\square = 8 + 8 + 5$	21	1	2C2a, 2C2b	Y2 Autumn Test 4
12	$68 + 19 = \square$	87	1	2C2a, 2C2b	Y2 Summer Test 1, Y2 Summer Test 6
13	$\frac{1}{4}$ of 40 = \square	10	1	2F1a	Y2 Summer Test 3
14	$753 + 200 = \square$	953	1	3C1	Y3 Autumn Test 3
15	$8 \times 5 = \square$	40	1	3C6	Y3 Spring Test 5
16	$\square = 27 \div 3$	9	1	3C6	Y3 Spring Test 3
17	$4 \times 3 = \square$	12	1	3C6	Y3 Spring Test 3, Y3 Spring Test 5
18	$25 \times 5 = \square$	125	1	3C7	Y3 Spring Test 6, Y3 Summer Test 5
19	$344 + 359 = \square$	703	1	3C2	Y3 Autumn Test 4
20	$626 - 375 = \square$	251	1	3C2	Y2 Summer Test 1
21	$\frac{4}{10} + \frac{4}{10} = \square$	$\frac{8}{10}$	1	3F1a	Y3 Autumn Test 5, Y3 Spring Test 1
22	$437 - \square = 278$	159	1	3C4	Y3 Summer Test 1, Y3 Summer Test 6
23	$\square \div 5 = 6$	30	1	3C8	Y3 Spring Test 4, Y3 Summer Test 6
24	$\frac{5}{9} - \frac{1}{9} = \square$	$\frac{4}{9}$	1	3F4	Y3 Autumn Test 5
25	$\frac{3}{8}$ of 40 = \square	15	1	3F1b	Y3 Summer Test 3