Reasoning and Problem Solving
Step 6: Multiply 2 Digits by 1 Digit

National Curriculum Objectives:

Mathematics Year 4: (4C7) Multiply two-digit and three-digit numbers by a one-digit number using formal written layout

Differentiation:

Questions 1, 4 and 7 (Problem Solving)
Developing Solve the word problem by multiplying 2 digits by 1 digit using the expanded form only and no exchanges. Includes scaffolding.
Expected Solve the word problem. Supports multiplying 2 digits by 1 digit using the expanded method and includes exchanges.
Greater Depth Solve the word problem. Supports multiplying 2 digits by 1 digit using the short written method and includes exchanges. Includes missing numbers.

Questions 2, 5 and 8 (Problem Solving)
Developing Find the missing numbers to complete the calculation. Supports multiplying 2 digits by 1 digit using the expanded form only and no exchanges. Includes pictorial representations.
Expected Find the missing numbers to complete the calculation. Supports multiplying 2 digits by 1 digit using the short written method and includes exchanges. Includes pictorial representations.
Greater Depth Use the digit cards to complete the calculation. Supports multiplying 2 digits by 1 digit using the short written method and includes exchanges.

Questions 3, 6 and 9 (Reasoning)
Developing Identify whether the calculation has been solved correctly and explain your answer. Supports multiplying 2 digits by 1 digit using the expanded form only and no exchanges. Includes pictorial representations and scaffolding.
Expected Identify whether the calculation has been solved correctly and explain your answer. Supports multiplying 2 digits by 1 digit using the short written method and includes exchanges. Includes pictorial representations.
Greater Depth Identify who has solved the calculation incorrectly and explain your answer. Supports multiplying 2 digits by 1 digit using the short written method and includes exchanges.

More Year 4 Multiplication and Division resources.

Did you like this resource? Don't forget to review it on our website.

Multiply 2 Digits by 1 Digit

1a. Tim rowed 32 miles a day for 3 days and Sandy rowed 41 miles for 2 days. Who rowed the furthest?

	3	2	
x		3	
			(3 x 2)
			(3 x 30)

	4	1	
x		2	
			(2 x 1)
			(2 x 40)

Show your working using the expanded method.

D

PS

Multiply 2 Digits by 1 Digit

1b. Chris runs 13 miles a day for 3 days and Katie runs 12 miles for 4 days. Who ran the furthest?

	1	3	
x		3	
			(3 x 3)
			(3 x 10)

	1	2	
x		4	
			(4 x 2)
			(4 x 10)

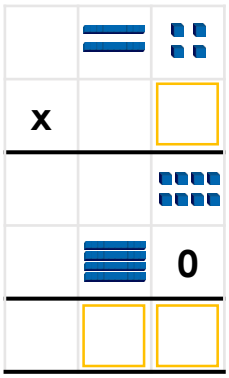
Show your working using the expanded method.

D

PS

2a. Find the missing numbers to complete the calculation.

	2	4
x		□
		8
	4	0
	□	□

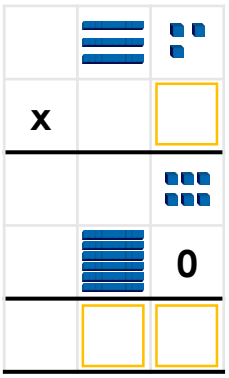


D

PS

2b. Find the missing numbers to complete the calculation.

	3	3
x		□
		6
	6	0
	□	□



D

PS

3a. Caroline has worked out the answer to a calculation.

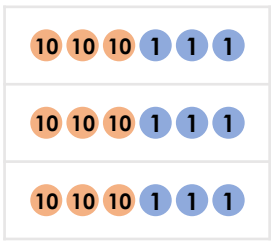
	2	2
x		4
		8
	8	0
	8	8

Is she correct? Explain your answer.

D

R

3b. Clint has worked out the answer to a calculation.



	3	3
x		3
		9
		9
	1	8

Is he correct? Explain your answer.

D

R

Multiply 2 Digits by 1 Digit

4a. Tony cycles 32 miles a day for 7 days and Steve cycles 36 miles for 5 days. Who cycled the furthest?

x				x				
			(x)				(x)	
			(x)				(x)	

Show your working using the expanded method.

PS

4b. Carol swims 42 lengths a day for 6 days and Kelvin swims 27 lengths for 8 days. Who swam the furthest?

x				x				
			(x)				(x)	
			(x)				(x)	

Show your working using the expanded method.

PS

5a. Find the missing numbers to complete the calculation.

	2	4	
x		□	
	□	□	
	1		

10	1	1
10	1	1
10	1	1
10	1	1
10	1	1
10	1	1

PS

5b. Find the missing numbers to complete the calculation.

	4	6	
x		□	
□	□	□	
	1		

10	10	1	1	1
10	10	1	1	1
10	10	1	1	1
10	10	1	1	1
10	10	1	1	1
10	10	1	1	1

PS

6a. Cheryl has worked out the answer to a calculation.

10	10	10	1	1	1	1	1	1
10	10	10	1	1	1	1	1	1
10	10	10	1	1	1	1	1	1
10	10	10	1	1	1	1	1	1

	3	6
x		4
1	2	4
	2	

Is she correct? Explain your answer.

R

6b. Charlie has worked out the answer to a calculation.

10	10	1	1	1	1	1	1	1
10	10	1	1	1	1	1	1	1
10	10	1	1	1	1	1	1	1

	2	7
x		3
	8	1
	2	

Is he correct? Explain your answer.

R

Multiply 2 Digits by 1 Digit

Multiply 2 Digits by 1 Digit

7a. Karis skied 36 miles a day for 7 days and Sally skied 43 miles a day for 6 days.

x

x

What is the difference between the two totals?

GD

PS

7b. Tara's horse rode 27 miles a day for 6 days and Piers's horse rode 28 miles a day for 5 days.

x

x

What is the difference between the two totals?

GD

PS

8a. Use the digit cards to complete the calculation.

3	7	5	9

		□	□
x			□
2	3	7	
	2		

GD

PS

8b. Use the digit cards to complete the calculation.

2	8	5	6

		□	□
X			□
4	3	0	
	3		

GD

PS

9a. Kim and Kyle have worked out this calculation.

	3	9
x		4
1	2	6
	3	

Kim

	3	9
x		4
1	5	6
	3	

Kyle

Who is incorrect? Explain their mistake.

GD

R

9b. Crystal and Kang have worked out this calculation.

	4	5
x		7
3	1	5
	3	

Crystal

	4	5
x		7
3	0	5
	3	

Kang

Who is incorrect? Explain their mistake.

GD

R

Reasoning and Problem Solving
Multiply 2 Digits by 1 Digit

Developing

1a. Tim rowed 96 miles while Sandy only rowed 82 miles.

2a.

	2	4
x		2
		8
	4	0
	4	8

3a. Caroline is correct because 4 x 2 = 8 and 4 x 20 = 80. 8 and 80 is 88.

Expected

4a. Tony cycled 224 miles while Steve only rowed 180 miles.

5a.

	2	4
x		3
	7	2
	1	

6a. Cheryl is incorrect because she has not remembered to add in her exchange. 36 x 4 = 144 not 124.

Greater Depth

7a. 36 x 7 = 252; 43 x 6 = 256. The difference is 6.

8a.

	7	9
x		3
2	3	7
	2	

9a. Kim is incorrect because she has not added the exchange.

Reasoning and Problem Solving
Multiply 2 Digits by 1 Digit

Developing

1b. Katie ran 48 miles while Chris only ran 39 miles.

2b.

	3	3
x		2
		6
	6	0
	6	6

3b. Clint is incorrect because he has calculated 3 x 3 instead of 3 x 30. 33 x 3 = 99 not 18.

Expected

4b. Carol swam 252 lengths while Kelvin only swam 216 lengths.

5b.

	4	6
x		3
1	3	8
	1	

6b. Charlie is correct because 3 x 7 = 21 and 3 x 20 = 60. 21 + 60 = 81.

Greater Depth

7b. 27 x 6 = 162; 28 x 5 = 140. The difference is 22.

8b.

	8	6
X		5
4	3	0
	3	

9b. Kang is incorrect because he has added the exchange incorrectly.