Varied Fluency
Step 2: Multiplying by 10, 100 and 1,000

National Curriculum Objectives:

Mathematics Year 6: (6F9a) Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to three decimal places

Differentiation:

Developing Questions to support multiplying a 1-digit or 2-digit number with up to 2 decimal places by 10, 100 and 1,000 (no zeros).
Expected Questions to support multiplying up to a 3-digit number with up to 3 decimal places by 10, 100 and 1,000 (including zeros).
Greater Depth Questions to support multiplying up to a 3-digit number with up to 3 decimal places using known multiplication facts and commutativity.

More resources which follow the same small steps as White Rose.

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

Multiplying by 10, 100 and 1,000

1a. Multiply the following number by 10, 100 and 1,000.

Th	H	T	O	Ths	Hths	
			5	6	8	
						x 10
						x 100
						x 1,000

D VF

Multiplying by 10, 100 and 1,000

1b. Multiply the following number by 10, 100 and 1,000.

Th	H	T	O	Ths	Hths	
			8	2	9	
						x 10
						x 100
						x 1,000

D VF

2a. Select the correct answer.

2.57 x 100 = ☐

25.7 | 257 | 2,570

D VF

2b. Select the correct answer.

43.51 x 100 = ☐

43,510 | 4,351 | 435.1

D VF

3a. Which calculation is incorrect?

A 92.6 x 10 = 926

B 3.65 x 100 = 36.5

C 8.24 x 1,000 = 8,240

D VF

3b. Which calculation is incorrect?

A 74.66 x 10 = 746.6

B 5.29 x 100 = 529

C 9.13 x 1,000 = 91.30

D VF

4a. Use the multiplication cards to complete the following calculations.

x 10 | x 100 | x 1,000

2.46 ☐ = 2,460

81.54 ☐ = 815.4

6.39 ☐ = 639

D VF

4b. Use the multiplication cards to complete the following calculations.

x 10 | x 100 | x 1,000

37.85 ☐ = 378.5

4.22 ☐ = 4,220

1.97 ☐ = 197

D VF

Multiplying by 10, 100 and 1,000

5a. Multiply the following number by 10, 100 and 1,000.

Th	H	T	O	Ths	Hths	Thths	
			1	3	4	9	
							x 10
							x 100
							x 1,000

VF

Multiplying by 10, 100 and 1,000

5b. Multiply the following number by 10, 100 and 1,000.

Th	H	T	O	Ths	Hths	Thths	
			4	7	1	8	
							x 10
							x 100
							x 1,000

VF

6a. Select the correct answer.

463.79 x 100 = ☐

46,379 | 4,637.9 | 463.790

VF

6b. Select the correct answer.

825.23 x 100 = ☐

825,230 | 82,523 | 825.230

VF

7a. Which calculation is incorrect?

A 490.6 x 10 = 4,906

B 4.94 x 100 = 49.4

C 0.49 x 1,000 = 490

VF

7b. Which calculation is incorrect?

A 87.6 x 10 = 876

B 9.454 x 100 = 954.4

C 165.98 x 1,000 = 165,980

VF

8a. Use the multiplication cards to complete the following calculations.

x 10 | x 100 | x 1,000

0.728 ☐ = 72.8

18.54 ☐ = 185.4

5.984 ☐ = 5,984

VF

8b. Use the multiplication cards to complete the following calculations.

x 10 | x 100 | x 1,000

35.650 ☐ = 35,650

0.874 ☐ = 8.74

968.48 ☐ = 96,848

VF

Multiplying by 10, 100 and 1,000

9a. Multiply the following number by 10, 100 and 1,000.

Th	H	T	O	Ths	Hths	Thths	
		7	2	9	1	6	
							x 10
							x 100
							x 1,000

GD VF

10a. Select the correct answer.

963.79 x 200 = ☐

19,275.8 | 192,758 | 96,379

GD VF

11a. Which calculation is incorrect?

A 824.68 x 50 = 41,234

B 44.40 x 10 x 10 = 4,440

C 4.840 x 2,000 = 96,800

GD VF

12a. Use the multiplication cards to complete the following calculations.

x 50 | x 200 | x 1,000

92.68 ☐ = 18,536

18.54 ☐ = 927

3.983 ☐ = 3,983

GD VF

Multiplying by 10, 100 and 1,000

9b. Multiply the following number by 10, 100 and 1,000.

Th	H	T	O	Ths	Hths	Thths	
		8	5	0	6	9	
							x 10
							x 100
							x 1,000

GD VF

10b. Select the correct answer.

284.37 x 20 = ☐

568.74 | 56,874 | 5,687.4

GD VF

11b. Which calculation is incorrect?

A 41.684 x 200 = 8,336.8

B 548.34 x 300 = 5,483.4

C 97.22 x 10 x 100 = 97,220

GD VF

12b. Use the multiplication cards to complete the following calculations.

x 500 | x 100 | x 2,000

6.050 ☐ = 605

41.93 ☐ = 20,965

7.28 ☐ = 14,560

GD VF

Varied Fluency
Multiplying by 10, 100 and 1,000

Developing

1a. 5.68 x 10 = 56.8, 5.68 x 100 = 568, 5.68 x 1,000 = 5,680

2a. 2.57 x 100 = 257

3a. B is incorrect.

4a. 2.46 x 1,000 = 2,460, 81.54 x 10 = 815.4 and 6.39 x 100 = 639.

Expected

5a. 1.349 x 10 = 13.49, 1.349 x 100 = 134.9, 1.349 x 1,000 = 1,349

6a. 46,379.

7a. B is incorrect.

8a. 0.728 x 100 = 72.8, 18.54 x 10 = 185.4, 5.984 x 1,000 = 5,984.

Greater Depth

9a. 72.916 x 10 = 729.16, 72.916 x 100 = 7,291.6, 72.916 x 1,000 = 72,916

10a. 192,758

11a. C is incorrect.

12a. 92.68 x 200 = 18,536, 18.54 x 50 = 927, 3.983 x 1,000 = 3,983

Varied Fluency
Multiplying by 10, 100 and 1,000

Developing

1b. 8.29 x 10 = 82.9, 8.29 x 100 = 829, 8.29 x 1,000 = 8,290

2b. 43.51 x 100 = 4,351

3b. C is incorrect.

4b. 37.85 x 10 = 378.5, 4.22 x 1,000 = 4,220 and 1.97 x 100 = 197.

Expected

5b. 4.718 x 10 = 47.18, 4.718 x 100 = 471.8, 4.718 x 1,000 = 4,718

6b. 82,523

7b. B is incorrect.

8b. 35.650 x 1,000 = 35,650, 0.874 x 10 = 8.74, 968.48 x 100 = 96,848.

Greater Depth

9b. 85.069 x 10 = 850.69, 85.069 x 100 = 8,506.9, 85.069 x 1,000 = 85,069

10b. 5,687.4

11b. B is incorrect.

12b. 6.050 x 100 = 605, 41.93 x 500 = 20,965, 7.28 x 2,000 = 14,560