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

### **National Curriculum Objectives:**

Mathematics Year 6: (6F9a) <u>Identify the value of each digit in numbers given to three</u> 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 <u>review</u> it on our website.

### Multiplying by 10, 100 and 1,000

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Th	Н	T	0	Ths	Hths	
			5	6	8	
						x 10
						x 100
						x 1,000

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

Th	Н	T	0	Ths	Hths	
			8	2	9	
			•			x 10
			•			x 100
			(			x 1,000





257

2b. Select the correct answer.

10



3a. Which calculation is incorrect?

8.24

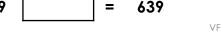
3b. Which calculation is incorrect?

4b. Use the multiplication cards to



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

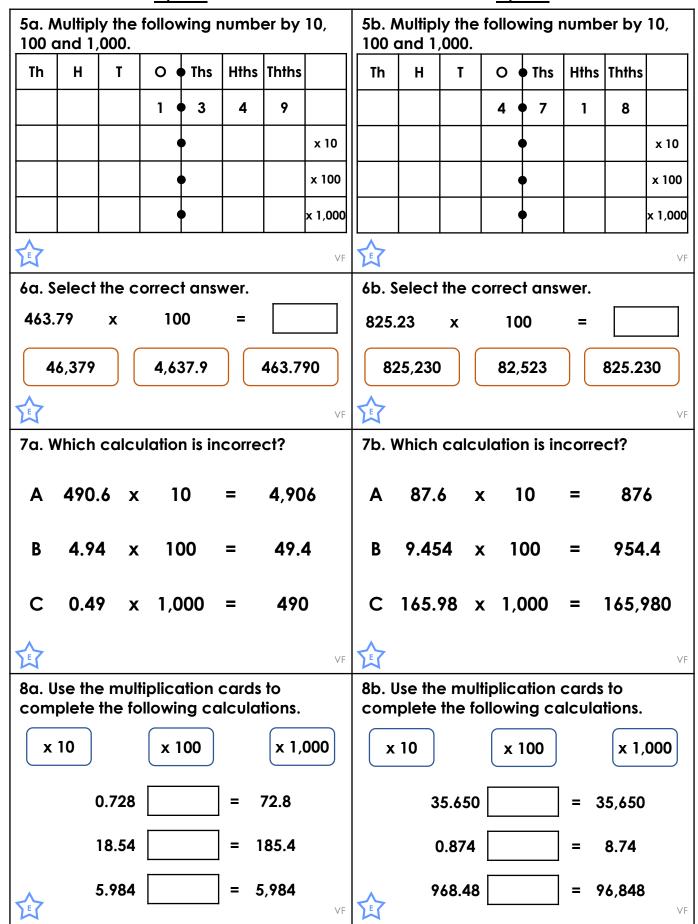
complete the following calculations.





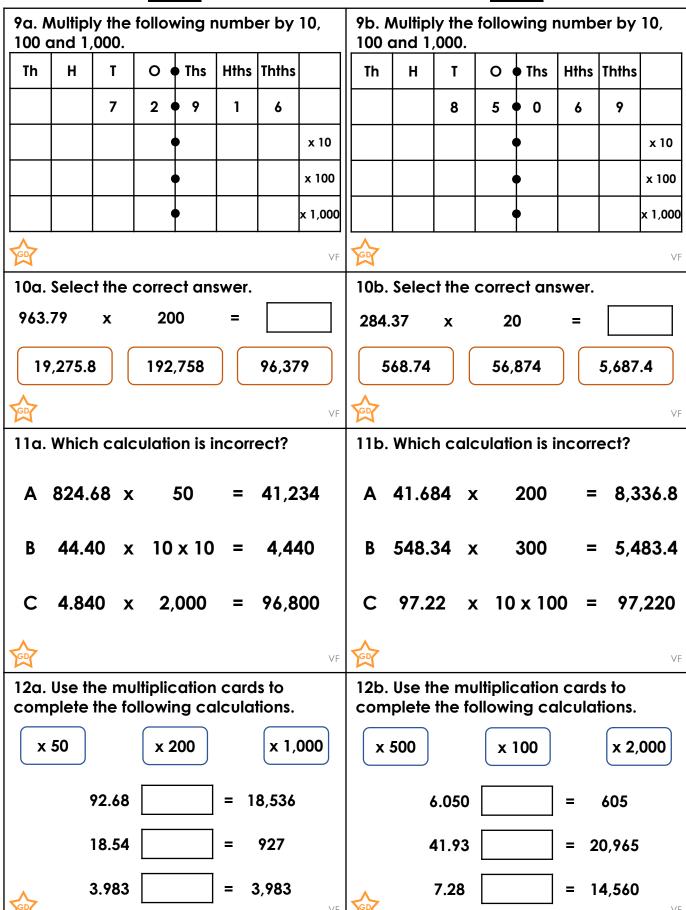
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### **Developing**

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

 $2a. 2.57 \times 100 = 257$ 

3a. B is incorrect.

4a. 2.46 x 1,000 = 2,460, 81.54 x 10 = 815.4

and  $6.39 \times 100 = 639$ .

### **Expected**

5a.  $1.349 \times 10 = 13.49$ ,  $1.349 \times 100 = 134.9$ ,  $1.349 \times 1,000 = 1,349$ 

6a. 46,379.

7a. B is incorrect.

8a.  $0.728 \times 100 = 72.8$ ,  $18.54 \times 10 = 185.4$ ,

 $5.984 \times 1,000 = 5,984.$ 

### **Greater Depth**

9a. 72.916 x 10 = 729.16, 72.916 x 100 =

 $7,291.6,72.916 \times 1,000 = 72,916$ 

10a. 192,758

11a. C is incorrect.

12a.  $92.68 \times 200 = 18,536, 18.54 \times 50 = 927,$ 

 $3.983 \times 1,000 = 3,983$ 

### <u>Developing</u>

1b.  $8.29 \times 10 = 82.9$ ,  $8.29 \times 100 = 829$ , 8.29

x 1,000 = 8,290

2b.  $43.51 \times 100 = 4{,}351$ 

3b. C is incorrect.

4b.  $37.85 \times 10 = 378.5$ ,  $4.22 \times 1,000 = 4,220$ 

and  $1.97 \times 100 = 197$ .

#### **Expected**

5b.  $4.718 \times 10 = 47.18$ ,  $4.718 \times 100 = 471.8$ ,

 $4.718 \times 1,000 = 4,718$ 

6b. 82,523

7b. B is incorrect.

8b.  $35.650 \times 1,000 = 35,650, 0.874 \times 10 =$ 

8.74,  $968.48 \times 100 = 96,848$ .

### **Greater Depth**

9b. 85.069 x 10 = 850.69, 85.069 x 100 =

 $8,506.9, 85.069 \times 1,000 = 85,069$ 

10b. 5,687.4

11b. B is incorrect.

12b. 6.050 x 100 = 605, 41.93 x 500 =

 $20,965, 7.28 \times 2,000 = 14,560$