## Varied Fluency <br> Step 11: Multiply by 10, 100 and 1,000

## National Curriculum Objectives:

Mathematics Year 5: (5C6b) Multiply and divide whole numbers and those involving decimals by 10,100 and 1000

## Differentiation:

Developing Questions to support multiplying by 10,100 and 1,000 . Using decimal numbers; all questions have visual representation for support (e.g. Place value chart, Gattegno grid). Expected Questions to support multiplying by 10, 100 and 1,000 . Using numbers up to 3 decimal places.
Greater Depth Questions to support multiplying by 10, 100 and 1,000 . Multi-step problems, using decimal numbers. (e.g. $13.425 \times 10 \times 100 \times 10$ )

More Year 5 Decimals resources.

Did you like this resource? Don't forget to review it on our website.
la．Multiply 215 by 10．Put your answer in the place value chart．

| FTh | Th | H | T | O | Tths | Hths |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |

2a．True or false？The place value chart shows the answer to 21 multiplied by 1，000．

| TTh | Th | H | T | O | Ihs | Hhs |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 0 |  |  |  |  |

Ba．Has this number been multiplied by 10,100 or 1,000 ？
$42 \times \square=42,000$

| TTh | Th | H | T | O | Tths | Hhs |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

包
4a．Fill in the missing number．

$$
\square \times 1,000=18,000
$$

| TTh | Th | H | T | O | Tths | Hths |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

1b．Multiply 36 by 100．Put your answer in the place value chart．

| TTh | Th | H | T | O | Tths | Heths |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |

2b．True or false？The place value chart shows the answer to 142 multiplied by 100.

| TTh | Th | H | T | O | Tths | Hths |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |

3b．Has this number been multiplied by 10,100 or 1,000 ？

$$
578 \times \square=5,780
$$

| TTh | Th | H | T | O | Tths | Hths |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

Ab．Fill in the missing number．
$\square \times 10=400$

| TTh | Th | H | T | O | Tths | Hths |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

5a. Multiply 6.125 by 100. Put your answer in the place value chart.

| TTh | Th | H | T | O | Tths | Hths |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |

8 a . Fill in the missing number.
$\square \times \quad 1,000=26$

5b. Multiply 12.053 by 1,000. Put your answer in the place value chart.

| TTh | Th | H | T | O | Tths | Hths |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |

shows the answer to 122.5 multiplied by 10.


7a. Has this number been multiplied by 10,100 or 1,000 ?
$54.22 \times \square=542.2$

## K

6b. True or false? The place value chart shows the answer to 0.95 multiplied by 100.

| TTh | Th | H | T | O | Tths | Hths |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | 0 | 0 |  |  |  |

7b. Has this number been multiplied by
10,100 or 1,000 ?

$$
0.064 \times \square=64
$$

8b. Fill in the missing number.

$$
\square \times 100=109
$$

9a. Multiply 310.99 by 100. Put your answer in the place value chart.

| TTh | Th | H | T | O | Tths | Hths |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |

10a. True or false? The place value chart shows the answer to 21.321 multiplied by 10, then by 10 again.

| TTh | Th | H | T | O | Tths | Hths |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

11a. Has this number been multiplied by 10,100 or 1,000 ?


## Varied Fluency

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

1 a.

| TTh | Th | H | T | 0 | Tths | Hths |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |

2a. False, it has been multiplied by 100.

3a. 1,000
4a. 18

## Expected

5a.

| TTh | Th | H | T | O | Tths | Hths |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

6a. True
7a. 10
8a. 0.026

## Greater Depth

9a.


10a. False, it has been multiplied by 1,000
11a. 100
12a. 0.055

## Developing

$1 b$.


2b. True
3b. 10
4b. 40

## Expected

5b.

| Th | Th | H | T | 0 | Tths | Hths |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\bullet$ |  | $\ddots$ | $\bullet$ |  |  |

6b. False, it has been multiplied by 1,000.
7b. 1,000
8b. 1.09
Greater Depth
$9 b$.


10b. True
11b. 10
12b. 0.158
5 b.

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Multiplying by 10,100 and 1,000

