1) Use the place value grid to multiply 6.125 by 10.

| Hundreds | Tens | Ones | tenths | hundredths | thousandths |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

$6.125 \times 10=\square$
2) Use the place value grids to multiply 0.26 by 100 and 1000 .

| Hundreds | Tens | Ones | tenths | hundredths | thousandths |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

$0.26 \times 100=$ $\qquad$
$0.26 \times 1000=$ $\qquad$
3) The place value chart shows the answer when 0.208 has been multiplied by 100. Is this true or false?

Explain how you know.

| Hundreds | Tens | Ones | tenths | hundredths | thousandths |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

4) Circle the digit card to complete each calculation.

5) Michael measured the thickness of 10 sheets of paper as 38.5 mm .
a) How thick are 100 sheets?
$\qquad$
$\qquad$
b) How thick are 1000 sheets?
$\qquad$
$\qquad$
6) Complete the table, multiplying each number on the left by 10, 100 and 1000 .

|  | $\times 10$ | $\times 100$ | $\times 1000$ |
| :---: | :---: | :---: | :---: |
| 2.04 |  |  |  |
| 12.1 |  |  |  |
| 0.426 |  |  |  |

2) Complete the calculations.
a) $9.006 \times 10 \times \square=9006$
b) $\square$
c) $0.087 \times 10 \times$ $\square$ $=8.7$
d)
$\square \div 10 \div 10=6.74$
3) 

Multiplying by 1000 is the same as multiplying by $10 \times 10 \times 10$.

Do you agree with Holly? Explain your answer.

$\qquad$
$\qquad$
$\qquad$

1) Year 5 are discussing what happens when 4.103 is multiplied by 100.


The one will move two places from the tenths column to the tens column.

Just add two zeros to the end of the number.


Which child is correct? Explain your answer fully.
$\qquad$
2) 200.394 is multiplied by 10 and then by 10 again.

The 9 will now be in the ones column and the 4 will be in the tenths column.

Do you agree with Dominic? Explain fully.

$\qquad$
$\qquad$
3) Roll a six-sided die four times to create a number with up to 3 decimal places. For example:

| Hundreds | Tens | Ones | tenths | hundredths | thousandths |
| :--- | :---: | :---: | :---: | :---: | :--- |
|  | 2 | 3 | 2 | 6 |  |

Use counters to record your number on the Gattegno chart.

| 10,000 | 20,000 | 30,000 | 40,000 | 50,000 | 60,000 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1,000 | 2,000 | 3,000 | 4,000 | 5,000 | 6,000 |
| 100 | 200 | 300 | 400 | 500 | 600 |
| 10 | 20 | 30 | 40 | 50 | 60 |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 |
| 0.01 | 0.02 | 0.03 | 0.04 | 0.05 | 0.06 |
| 0.001 | 0.002 | 0.003 | 0.004 | 0.005 | 0.006 |

What happens to the counters when you multiply your number by 10, 100 and 1000 ?

What patterns do you notice using the Gattegno chart? Investigate.

