Y5 wk beginning:30 ${ }^{\text {th }}$ March
Please note: Here is the
Monday+Tuesday+Wednesday sequence of yb Maths and for answers scroll to end of all documents
Y5 Monday 30 ${ }^{\text {th }}$ March:
A. Copy out and colour code these examples as revision posters to help to remember:

$$
\begin{aligned}
& 34 \times 10=340 \\
& 34 \times 100=3400 \\
& 34 \times 1000=34000 \\
& 96000 \div 10=9600 \\
& 96000 \div 100=960 \\
& 96000 \div 1000=96
\end{aligned}
$$

Also remember the slider when you need to move digits and keep decimal point in same place like this:


Remember to divide by 100 move digits two places to right
To divide by 1000 move 3 places to right
B. pre-assessment focus spr. 2 wk. 1 (see below)

## Spring 2: Week 1: Pre-Learning Task

The pre-learning task below could be used to assess pupils' starting points within this objective. It needs to be completed by all/ or some of the pupils in advance of the main teaching.

Name

## Spring 2: Week 1

Objective: $\quad$ Multiply and divide whole numbers and those involving decimals by 10, 100 Multiplication \& and 1000.
Division
Multiply the following numbers by 10, Divide the following numbers by 10, 100
100 or 1000
or 1000

| $231 \times 10$ |  | $542 \div 10$ |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $27.4 \times 10$ |  | $234.7 \div 10$ |  |  |
| $238 \times 100$ |  | $3289 \div 100$ |  |  |
| $2.52 \times 100$ |  | $345.12 \div 100$ |  |  |
| $218 \times 1000$ |  | $6721 \div 1000$ |  |  |
| $34.123 \times 1000$ |  | $6212.8 \div 1000$ |  |  |
| $32.1 \times 1000$ |  | $3.123 \div 100$ |  |  |

## On Monday please

Tuesday $31^{\text {st }}$ March:
Skills worksheet (practice and consolidation)

## Consolidation

ivide whole numbers and those involving decimals by 10 ,

## Pencil and Paper Activities

Examples:

|  | $X$ <br> 10 | $X$ <br> 100 | $X$ <br> 1000 |
| :--- | :---: | :---: | :---: |
| 34 |  |  |  |
| 126 |  |  |  |
| 2371 |  |  |  |
| 2187 |  |  |  |
| 271 |  |  |  |


|  | $\div$ | $\div$ | $\div$ |
| :--- | :---: | :---: | :---: |
| 5281 |  |  |  |
| 6721 |  |  |  |
| 9014 |  |  |  |
| 7812 |  |  |  |
| 891 |  |  |  |

Multiply by 10; 100 and 1000
$\begin{array}{llllll}23.135 & 25.152 & 87.261 & 136.257 & 23.11 & 289.12\end{array}$

Divide by 10,100 and 1000
67.12
42.16
425.125
67.21
95.32
56.17
91.34

## Wednesday/ Thursday see how far you can move through mastery to greater depth.

## Mastery:

## If pupils have mastered this objective they will be able to complete these activities independently:

Very rapidly multiply the following by 10.
$\begin{array}{lllll}32.3 & 45.6 & 176 & 33 & 349.23\end{array} 1.678$
Now do the same by very rapidly multiplying by 100:
$\begin{array}{lllll}23.12 & 672.12 & 98 & 12.56 & 23.67\end{array}$
Now, divide these by 10 very rapidly:
$\begin{array}{lllll}2.45 & 15,23 & 351.34 & 267.23 & 1.56\end{array}$

If you know how to multiply by 10 , how can you go about multiplying by multiples of 10 ?

Look at this example: $234 \times 20$
You know $234 \times 10=2340$
then multiply $2340 \times 2=4680$
Now complete these:

| $347 \times 30$ | $379 \times 40$ | $161 \times 30$ |
| :--- | :--- | :--- |
| $563 \times 20$ | $432 \times 50$ | $283 \times 30$ |
| $671 \times 20$ | $523 \times 60$ | $116 \times 40$ |

At the school concert there were 200 seats. The tickets were all sold and the school collected $£ 2,400$ for them.
Find a quick way of working out how much each ticket cost.

The shopkeeper announced that he had just received a special delivery of the new Wonka chocolate bar. He sold all his 2000 bars within the hour. He added up the money he took for them and it came to £2400. Find a quick way of finding out how much each bar cost.

Very rapidly divide the following by 100.
32.3
45.6
17623
349.23
1.678

Now do the same by very rapidly dividing by 1000 :
$\begin{array}{lllll}123.12 & 672.12 & 98 & 102.56 & 23.67\end{array}$
Now, multiply these by 10 very rapidly:
$\begin{array}{lllll}2.45 & 15,23 & 351.34 & 267.23 & 1.56\end{array}$

## Greater Depth:

## Activities for pupils working at greater depth:

At a recent music festival the organisers sold exactly 4000 tickets.
The money they collected from the tickets was $£ 104,000$. How much did each ticket cost. Did you work out a quick way of doing this?
In addition each person spent on average £24.89 on food and souvenir items.
How much money was collected for food and souvenirs?
The festival cost $£ 154,000$ to put on, including food and souvenirs. Did the festival make a profit? Show your workings.

10 gymnastic competitors wanted time on the competition floor before the final started. They had 4 hours and 40 minutes before the floor was closed. How much time was each allocated on the floor before the final started?

A footballer touches the ball every 100 seconds. If $s / h e$ is playing for 90 minutes, how many times will they touch the ball?

A new football stadium is being built. The seating is arranged in blocks of 100 .
There are 4 sides to the stadium (North Stand; East Stand; South Stand and West Stand).
The North Stand will have 36 blocks of 100 ; the East Stand will have 48 blocks of 100 ; the South Stand will have 54 blocks of 100 ; and the West Stand will have 19 blocks of 100.

How many seats will the stadium have in total.

For every block of 100 tickets in the West Stand the football club receives $£ 3,665$. How much will each West Stand ticket cost? How much will the club get if the West Stand is full?

For every block of 100 tickets in the South Stand the football club receives $£ 4,865$. How much will each South Stand ticket cost?
How much will the club get if the South Stand is full?

## Don't peep at the answers!

## Ask an adult to mark with you.

## Answers below:

## Focus Maths Answers Year 5

## Spring Term 2 Week 1

Page 116 Pre-Learning Task

| Multiply the following numbers <br> by 10,100 or 1000 |  | Divide the following numbers <br> by 10,100 or 1000 |  |
| :---: | :---: | :---: | :---: |
| $231 \times 10$ | $\mathbf{2 3 1 0}$ | $542 \div 10$ | $\mathbf{5 4 . 2}$ |
| $27.4 \times 10$ | 274 | $234.7 \div 10$ | $\mathbf{2 3 . 4 7}$ |
| $238 \times 100$ | 23800 | $3289 \div 100$ | $\mathbf{3 2 . 8 9}$ |
| $2.52 \times 100$ | $\mathbf{2 5 2}$ | $345.12 \div 100$ | $\mathbf{3 . 4 5 1 2}$ |
| $218 \times 1000$ | $\mathbf{2 1 8 0 0 0}$ | $6721 \div 1000$ | $\mathbf{6 . 7 2 1}$ |
| $34.123 \times 1000$ | $\mathbf{3 4 1 2 3}$ | $6212.8 \div 1000$ | $\mathbf{6 . 2 1 2 8}$ |
| $32.1 \times 1000$ | $\mathbf{3 2 1 0 0}$ | $3.123 \div 100$ | $\mathbf{0 . 0 3 1 2 3}$ |
| $237.32 \times 100$ | $\mathbf{2 3 7 3 2}$ | $3.12 \div 10$ | $\mathbf{0 . 3 1 2}$ |

Page 117 Practice and Consolidation

|  | $\times 10$ | $\times 100$ | $\times 1000$ |
| :---: | :---: | :---: | :---: |
| 34 | 340 | 3400 | 34000 |
| 126 | $\mathbf{1 2 6 0}$ | $\mathbf{1 2 6 0 0}$ | $\mathbf{1 2 6 0 0 0}$ |
| 2371 | 23710 | 237100 | 2371000 |
| 2187 | 21870 | 218700 | 2187000 |
| 271 | 2710 | 27100 | 271000 |


|  | $\div 10$ | $\div 100$ | $\div 1000$ |
| :---: | :---: | :---: | :---: |
| 5281 | 528.1 | 52.81 | 5.281 |
| 6721 | 672.1 | $\mathbf{6 7 . 2 1}$ | $\mathbf{6 . 7 2 1}$ |
| 9014 | $\mathbf{9 0 1 . 4}$ | $\mathbf{9 0 . 1 4}$ | $\mathbf{9 . 0 1 4}$ |
| 7812 | $\mathbf{7 8 1 . 2}$ | $\mathbf{7 8 . 1 2}$ | $\mathbf{7 . 8 1 2}$ |
| 891 | $\mathbf{8 9 . 1}$ | $\mathbf{8 . 9 1}$ | $\mathbf{0 . 8 9 1}$ |

Multiply by 10; 100 and 1000

|  | $\times 10$ | $\times 100$ | $\times 1000$ |
| :---: | :---: | :---: | :---: |
| 23.135 | $\mathbf{2 3 1 . 3 5}$ | $\mathbf{2 3 1 3 . 5}$ | $\mathbf{2 3 1 3 5}$ |
| 25.152 | $\mathbf{2 5 1 . 5 2}$ | $\mathbf{2 5 1 5 . 2}$ | $\mathbf{2 5 1 5 2}$ |
| 87.261 | $\mathbf{8 7 2 . 6 1}$ | $\mathbf{8 7 2 6 . 1}$ | $\mathbf{8 7 2 6 1}$ |
| 136.257 | $\mathbf{1 3 6 2 . 5 7}$ | $\mathbf{1 3 6 2 5 . 7}$ | $\mathbf{1 3 6 2 5 7}$ |
| 23.11 | $\mathbf{2 3 1 . 1}$ | $\mathbf{2 3 1 1}$ | $\mathbf{2 3 1 1 0}$ |
| 289.12 | $\mathbf{2 8 9 1 . 2}$ | $\mathbf{2 8 9 1 2}$ | $\mathbf{2 8 9 1 2 0}$ |

Divide by 10, 100 and 1000

|  | $\div 10$ | $\div 100$ | $\div 1000$ |
| :---: | :---: | :---: | :---: |
| 67.12 | $\mathbf{6 . 7 1 2}$ | 0.6712 | 0.06712 |
| 42.16 | 4.216 | 0.4216 | 0.04216 |
| 425.125 | 42.5125 | $\mathbf{4 . 2 5 1 2 5}$ | $\mathbf{0 . 4 2 5 1 2 5}$ |
| 67.21 | 6.721 | 0.6721 | 0.06721 |
| 95.32 | 9.532 | 0.9532 | 0.09532 |
| 56.17 | 5.617 | 0.5617 | 0.05617 |
| 91.34 | 9.134 | 0.9134 | $\mathbf{0 . 0 9 1 3 4}$ |

## Page 118 Mastering this Objective

Very rapidly multiply the following by 10 .
$\begin{array}{lllll}32.3-323 & 45.6-456 & 176.23-1762.3 & 349.23-3492.3 & 1.678-16.78\end{array}$

Now do the same by very rapidly multiplying by 100:
23.12-2312

Now, divide these by 10 very rapidly:
2.45-0.245 15.23 - $\mathbf{1 . 5 2 3} \quad 351.34-\mathbf{3 5 . 1 3 4} \quad 267.23-\mathbf{2 6 . 7 2 3} \quad 1.56-\mathbf{0 . 1 5 6}$

If you know how to multiply by 10 , how can you go about multiplying by multiples of 10 ? Look at this example: $234 \times 20$, you know $234 \times 10=2340$, then multiply $2340 \times 2=4680$
Now complete these:
$347 \times 30=10410 \quad 379 \times 40=15160 \quad 161 \times 30=4830$
$563 \times 20=11260 \quad 432 \times 50=\mathbf{2 1 6 0 0} \quad 283 \times 30=8490$
$671 \times 20=13420 \quad 523 \times 60=31380 \quad 116 \times 40=4640$
At the school concert there were 200 seats. The tickets were all sold and the school collected £2,400 for them. Find a quick way of working out how much each ticket cost. $2400 \div 2=1200 \div 100=£ \mathbf{1 2}$

The shopkeeper announced that he had just received a special delivery of the new Wonka chocolate bar. He sold all his 2000 bars within the hour. He added up the money he took for them and it came to £2400. Find a quick way of finding out how much each bar cost. $2400 \div 2=1200 \div 1000=\boldsymbol{£ 1 . 2 0}$

Very rapidly divide the following by 100.
32.3-0.323 $45.6-\mathbf{0 . 4 5 6}$ 176.23-1.7623 $349.23-3.49231 .678-0.01678$

Now do the same by very rapidly dividing by 1000:
123.12-0.12312 672.12-0.67212 98-0.098 102.56-0.10256
23.67-0.02367

Now, multiply these by 10 very rapidly:
2.45-24.5 15.23-152.3 351.34-3513.4 $267.23-2672.31 .56-15.6$

## Page 119 Working at greater depth

At a recent music festival the organisers sold exactly 4000 tickets. The money they collected from the tickets was £104,000. How much did each ticket cost? Did you work out a quick way of doing this? $104000 \div 1000=104 \div 4=\mathbf{£ 2 6}$ In addition each person spent on average £24.89 on food and souvenir items. How much money was collected for food and souvenirs? £99560 The festival cost $£ 154,000$ to put on, including food and souvenirs. Did the festival make a profit? Show your workings. $£ 104000+£ 99560=\mathbf{£ 2 0 3 , 5 6 0}$, they made a profit of $£ 49,560$.

10 gymnastic competitors wanted time on the competition floor before the final started. They had 4 hours and 40 minutes before the floor was closed. How much time was each allocated on the floor before the final started? 4 hours 40 mins $=280$ mins $\div 10=\mathbf{2 8}$ minutes
A footballer touches the ball every 100 seconds. If $s / h e$ is playing for 90 minutes, how many times will they touch the ball? $90 \times 60=5400$ seconds $5400 \div 100=54$ times

A new football stadium is being built. The seating is arranged in blocks of 100. There are 4 sides to the stadium (North Stand; East Stand; South Stand and West Stand). The North Stand will have 36 blocks of 100; the East Stand will have 48 blocks of 100; the South Stand will have 54 blocks of 100; and the West Stand will have 19 blocks of 100. How many seats will the stadium have in total? $\quad(36 \times 100)+(48 \times 100)+(54 \times 100)+(19 \times 100)=$ $3600+4800+5400+1900=15700$ seats

For every block of 100 tickets in the West Stand the football club receives $£ 3,665$. How much will each West Stand ticket cost? $£ 36.65$ How much will the club get if the West Stand is full? $£ 69,635$ For every block of 100 tickets in the South Stand the football club receives $£ 4,865$. How much will each South Stand ticket cost? $£ 48.65$ How much will the club get if the South Stand is full? $£ 262,710$

## Focus Maths Answers Year 5

## Spring Term 2 Week 1

Page 116 Pre-Learning Task

| Multiply the following numbers <br> by 10,100 or 1000 |  | Divide the following numbers <br> by 10,100 or 1000 |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $231 \times 10$ | $\mathbf{2 3 1 0}$ | $542 \div 10$ | $\mathbf{5 4 . 2}$ |  |
| $27.4 \times 10$ | 274 | $234.7 \div 10$ | $\mathbf{2 3 . 4 7}$ |  |
| $238 \times 100$ | 23800 | $3289 \div 100$ | $\mathbf{3 2 . 8 9}$ |  |
| $2.52 \times 100$ | $\mathbf{2 5 2}$ | $345.12 \div 100$ | $\mathbf{3 . 4 5 1 2}$ |  |
| $218 \times 1000$ | $\mathbf{2 1 8 0 0 0}$ | $6721 \div 1000$ | $\mathbf{6 . 7 2 1}$ |  |
| $34.123 \times 1000$ | $\mathbf{3 4 1 2 3}$ | $6212.8 \div 1000$ | $\mathbf{6 . 2 1 2 8}$ |  |
| $32.1 \times 1000$ | $\mathbf{3 2 1 0 0}$ | $3.123 \div 100$ | $\mathbf{0 . 0 3 1 2 3}$ |  |
| $237.32 \times 100$ | $\mathbf{2 3 7 3 2}$ | $3.12 \div 10$ | $\mathbf{0 . 3 1 2}$ |  |

Page 117 Practice and Consolidation

|  | $\times 10$ | $\times 100$ | $\times 1000$ |
| :---: | :---: | :---: | :---: |
| 34 | 340 | 3400 | 34000 |
| 126 | $\mathbf{1 2 6 0}$ | $\mathbf{1 2 6 0 0}$ | $\mathbf{1 2 6 0 0 0}$ |
| 2371 | $\mathbf{2 3 7 1 0}$ | $\mathbf{2 3 7 1 0 0}$ | $\mathbf{2 3 7 1 0 0 0}$ |
| 2187 | $\mathbf{2 1 8 7 0}$ | $\mathbf{2 1 8 7 0 0}$ | $\mathbf{2 1 8 7 0 0 0}$ |
| 271 | $\mathbf{2 7 1 0}$ | $\mathbf{2 7 1 0 0}$ | $\mathbf{2 7 1 0 0 0}$ |


|  | $\div 10$ | $\div 100$ | $\div 1000$ |
| :---: | :---: | :---: | :---: |
| 5281 | 528.1 | 52.81 | 5.281 |
| 6721 | 672.1 | 67.21 | 6.721 |
| 9014 | 901.4 | 90.14 | 9.014 |
| 7812 | 781.2 | 78.12 | 7.812 |
| 891 | 89.1 | 8.91 | 0.891 |

Multiply by 10; 100 and 1000

|  | $\times 10$ | $\times 100$ | $\times 1000$ |
| :---: | :---: | :---: | :---: |
| 23.135 | 231.35 | $\mathbf{2 3 1 3 . 5}$ | $\mathbf{2 3 1 3 5}$ |
| 25.152 | $\mathbf{2 5 1 . 5 2}$ | $\mathbf{2 5 1 5 . 2}$ | $\mathbf{2 5 1 5 2}$ |
| 87.261 | $\mathbf{8 7 2 . 6 1}$ | $\mathbf{8 7 2 6 . 1}$ | $\mathbf{8 7 2 6 1}$ |
| 136.257 | $\mathbf{1 3 6 2 . 5 7}$ | $\mathbf{1 3 6 2 5 . 7}$ | $\mathbf{1 3 6 2 5 7}$ |
| 23.11 | $\mathbf{2 3 1 . 1}$ | $\mathbf{2 3 1 1}$ | $\mathbf{2 3 1 1 0}$ |
| 289.12 | $\mathbf{2 8 9 1 . 2}$ | $\mathbf{2 8 9 1 2}$ | $\mathbf{2 8 9 1 2 0}$ |

Divide by 10, 100 and 1000

|  | $\div 10$ | $\div 100$ | $\div 1000$ |
| :---: | :---: | :---: | :---: |
| 67.12 | $\mathbf{6 . 7 1 2}$ | 0.6712 | 0.06712 |
| 42.16 | 4.216 | 0.4216 | 0.04216 |
| 425.125 | 42.5125 | $\mathbf{4 . 2 5 1 2 5}$ | $\mathbf{0 . 4 2 5 1 2 5}$ |
| 67.21 | 6.721 | 0.6721 | 0.06721 |
| 95.32 | 9.532 | 0.9532 | 0.09532 |
| 56.17 | 5.617 | 0.5617 | 0.05617 |
| 91.34 | 9.134 | 0.9134 | $\mathbf{0 . 0 9 1 3 4}$ |

## Page 118 Mastering this Objective

Very rapidly multiply the following by 10 .
$\begin{array}{llllll}32.3-323 & 45.6-456 & 176.23-1762.3 & 349.23-3492.3 & 1.678-16.78\end{array}$
Now do the same by very rapidly multiplying by 100:
23.12-2312

Now, divide these by 10 very rapidly:
2.45-0.245 15.23 - $\mathbf{1 . 5 2 3} \quad 351.34-\mathbf{3 5 . 1 3 4} \quad 267.23-\mathbf{2 6 . 7 2 3} \quad 1.56-\mathbf{0 . 1 5 6}$

If you know how to multiply by 10 , how can you go about multiplying by multiples of 10 ? Look at this example: $234 \times 20$, you know $234 \times 10=2340$, then multiply $2340 \times 2=4680$
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$671 \times 20=13420 \quad 523 \times 60=31380 \quad 116 \times 40=4640$
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The shopkeeper announced that he had just received a special delivery of the new Wonka chocolate bar. He sold all his 2000 bars within the hour. He added up the money he took for them and it came to £2400. Find a quick way of finding out how much each bar cost. $2400 \div 2=1200 \div 1000=\boldsymbol{£ 1 . 2 0}$

Very rapidly divide the following by 100.
32.3-0.323 $45.6-\mathbf{0 . 4 5 6}$ 176.23-1.7623 $349.23-3.49231 .678-0.01678$

Now do the same by very rapidly dividing by 1000:
123.12-0.12312 672.12-0.67212 98-0.098 102.56-0.10256
23.67-0.02367

Now, multiply these by 10 very rapidly:
2.45-24.5 15.23-152.3 351.34-3513.4 $267.23-2672.31 .56-15.6$

## Page 119 Working at greater depth

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10 gymnastic competitors wanted time on the competition floor before the final started. They had 4 hours and 40 minutes before the floor was closed. How much time was each allocated on the floor before the final started? 4 hours 40 mins $=280$ mins $\div 10=\mathbf{2 8}$ minutes
A footballer touches the ball every 100 seconds. If $s / h e$ is playing for 90 minutes, how many times will they touch the ball? $90 \times 60=5400$ seconds $5400 \div 100=54$ times

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For every block of 100 tickets in the West Stand the football club receives $£ 3,665$. How much will each West Stand ticket cost? $£ 36.65$ How much will the club get if the West Stand is full? $£ 69,635$ For every block of 100 tickets in the South Stand the football club receives £4,865. How much will each South Stand ticket cos†? £48.65 How much will the club get if the South Stand is full? $£ 262,710$

