## PLATINUM CHALLENGE KS1 \& Year 3

| Multiplying numbers by 10,100 and 1000 mentally |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
| All digits move to the left 1, 2 or 3 times. Fill any gaps with place holders |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Eg. $14 \times 10=140$ |  |  |  |  |  |  |  |
| Th | H | T | U |  | $t^{\text {th }}$ | $h^{\text {th }}$ | th ${ }^{\text {th }}$ |
|  |  | 1 | 4 |  |  |  |  |
|  | 1 | 4 | 0 |  |  |  |  |
| Eg $14 \times 100=1400$ |  |  |  |  |  |  |  |
| Th | H | T | U |  | $\mathrm{t}^{\text {th }}$ | $\mathrm{h}^{\text {th }}$ | th ${ }^{\text {th }}$ |
|  |  | 1 | 4 |  |  |  |  |
| 1 | 4 | 0 | 0 |  |  |  |  |
| Eg. $1.4 \times 1000=1400$ |  |  |  |  |  |  |  |
| Th | H | T | U |  | $t^{\text {th }}$ | $h^{\text {th }}$ | th ${ }^{\text {th }}$ |
|  |  |  | 1 |  | 4 |  |  |
| 1 | 4 | 0 | 0 |  |  |  |  |

Square Numbers
$1 \times 1=1$
$2 \times 2=4$
$3 \times 3=9$
$4 \times 4=16$
$5 \times 5=25$
$6 \times 6=36$
$7 \times 7=49$
$8 \times 8=64$
$9 \times 9=81$
$10 \times 10=100$
$12 \times 12=144$

## Dividing numbers by

10, 100 and 1000 mentally
All digits move to the right 1,2 or 3 times. Fill any gaps with place holders Eg.
140 divided by $10=14$

| $T h$ | $H$ | $T$ | $U$ | . | $t^{\text {th }}$ | $h^{\text {th }}$ | $t h^{\text {th }}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 1 | 4 | 0 |  |  |  |  |
|  |  | 1 | 4 |  |  |  |  |

Eg. 1400 divided by $100=14$

| $T h$ | $H$ | $T$ | $U$ | . | $t^{t h}$ | $h^{\text {th }}$ | $t h^{\text {th }}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 4 | 0 | 0 |  |  |  |  |
|  |  | 1 | 4 |  |  |  |  |

Eg. 1400 divided by $1000=1.4$

| $T h$ | $H$ | $T$ | $U$ | . | $t^{\text {th }}$ | $h^{\text {th }}$ | $t^{\text {th }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 4 | 0 | 0 |  |  |  |  |
|  |  |  | 1 | . | 4 |  |  |

## Time

Tell the time to the nearest minute on an analogue clock
Days in a year (365/366)
Days in each month
Days in the week Hours in a day
Minutes in an hour Seconds in a minute

Learn all the factors of numbers up to 30
Factors are numbers that divide exactly into another number.
The factors of 12, for example, are 1, 2, 3, 4, 6 and 12.
Factors can be shown in pairs. The factors of 12 can be shown:

- 1 and 12 because $1 \times 12=12$
- 2 and 6 because $2 \times 6=12$
- 3 and 4 because $3 \times 4=12$

Each pair multiplies to make 12 .

| Learn common <br> halves and <br> apply to halving |
| :--- |
| numbers to 100 |
| $\frac{1}{2}$ of $1=0.5$ |
| $\frac{1}{2}$ of $2=1$ |
| $\frac{1}{2}$ of $3=1.5$ |
| $\frac{1}{2}$ of $4=2$ |
| $\frac{1}{2}$ of $5=2.5$ |
| $\frac{1}{2}$ of $6=3$ |
| $\frac{1}{2}$ of $7=3.5$ |
| $\frac{1}{2}$ of $8=4$ |
| $\frac{1}{2}$ of $9=4.5$ |
| $\frac{1}{2}$ of $10=5$ |
|  |
| $\frac{1}{2}$ of $20=10$ |
| $\frac{1}{2}$ of $30=15$ |
| $\frac{1}{2}$ of $40=20$ |
| $\frac{1}{2}$ of $50=25$ |
| $\frac{1}{2}$ of $60=30$ |
| $\frac{1}{2}$ of $70=35$ |
| $\frac{1}{2}$ of $80=40$ |
| $\frac{1}{2}$ of $90=45$ |
| $\frac{1}{2}$ of $100=50$ |

Well Done for achieving your Gold Award!!!

Can you now become a Platinum award holder?

