| Place value |  |  |
| :---: | :---: | :---: |
| 88 | $\frac{1}{4}$ | 8 |
| 6, | 8 | 9 |


| Partition | Compare |
| :---: | :---: |
| Order | Estimate |
| Negative numbers |  |

Negative Numbers Positive Numbers

 $\longleftrightarrow$ Smaller $\longrightarrow$

## Key vocabulary multiplication and division

Factor pairs
e.g. for 12 =

1x12, 2x6, 3×4 Multiplication of 3 numbers
e.g. $2 \times 3 \times 3$

## Commutativity

e.g. $3 \times 5=5 \times 3$

Read co-ordinates along the $x$ axis (horizontal) first and then the $y$ axis


Units of measurement

| Length | $1 \mathrm{~km}=1000 \mathrm{~m}$ | $1 \mathrm{~m}=100 \mathrm{~cm}$ | $1 \mathrm{~cm}=10 \mathrm{~mm}$ |
| :---: | :---: | :---: | :---: |
| Time | $1 \mathrm{~min}=60 \mathrm{secs}$ | 1hour=60mins | 1day=25hours |
| 1year=365days | 1year=12months | 1week=7days | 2weeks=14days |
| Capacity | $11=1000 \mathrm{ml}$ | Mass | $1 \mathrm{~kg}=1000 \mathrm{~g}$ |




Fraction Wall


YEAR 4 MATHS KNOWLEDGE ORGANISER



Time

| Digital |
| :---: |
| Analogue |
| 12 and 24 hours e.g. |
| $8: 32 \mathrm{pm}=20: 32$ |

8:32pm $=20: 32$



Right-angled
Right-angled
triangle


| Date | Focus | signature |
| :--- | :--- | :--- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

You can learn your times tables from other times tables facts.
For example, if you know $3 \times 9=27$ then you also know $9 \times 3=27$
So if you've learned all times tables except the nines, you will already know each answer except $9 \times 9$

Practise the times tables below and you'll know them all in no time.

## Multiplication

| $X$ | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 2 | 0 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 |
| 3 | 0 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 | 33 | 36 |
| 4 | 0 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 | 44 | 48 |
| 5 | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |
| 6 | 0 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 | 66 | 72 |
| 7 | 0 | 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 | 77 | 84 |
| 8 | 0 | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 88 | 96 |
| 9 | 0 | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90 | 99 | 108 |
| 10 | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
| 11 | 0 | 11 | 22 | 33 | 44 | 55 | 66 | 77 | 88 | 99 | 110 | 121 | 132 |
| 12 | 0 | 12 | 24 | 36 | 48 | 60 | 72 | 84 | 96 | 108 | 120 | 132 | 144 |

