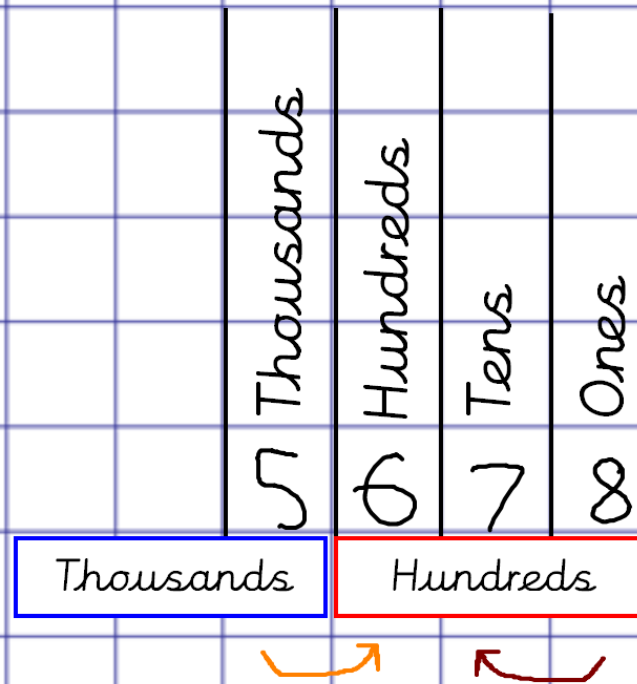


## Place Value vocabulary:

⊖ When we move to the left, we are making the digit  $10\times$  larger e.g:  
 $8 \times 10 = 80$ .

⊖ When we move to the right, we are making the digit  $10\times$  smaller. e.g:  
 $5000 \div 10 = 500$ .



*Addition vocabulary:*

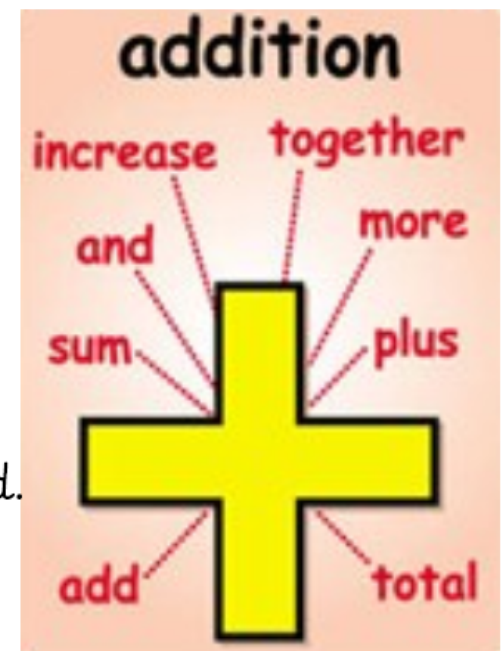
*Addend + Addend = Total*

*Addend + Addend = Sum*


$$5 + 2 = 7$$

$$123 + 27 = 150$$

*Pupils in Year 2 work with numbers up to One Thousand.*




Addition  
No carrying


$$\begin{array}{r} 56 \\ + 32 \\ \hline 88 \end{array}$$

- Start on the right, and move to the left.

⊖ Add each digit that is in the same column.

## Addition With carrying


$$\begin{array}{r} \text{+1} \\ 32 \\ + 19 \\ \hline 51 \end{array}$$

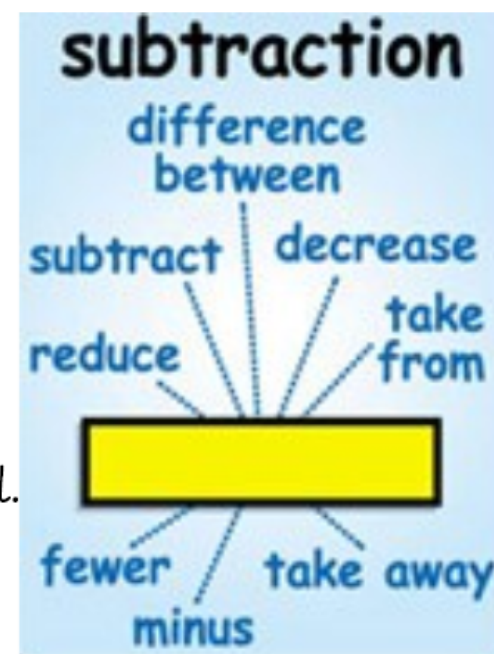
- Start on the right, and move to the left.
- Add each digit that is in the same column.
- When your total is above 9, carry the Tens digit into the next column and write it at the top (e.g.  $2 + 9 = 11$ )

## Subtraction vocabulary:

$$\begin{array}{r} \text{Minuend} - \text{Subtrahend} = \text{Difference} \\ 5 - 2 = 3 \end{array}$$

$$123 - 27 = 96$$

Pupils in Year 2 work with numbers up to One Thousand.






Subtraction  
No exchanges

$$\begin{array}{r} 27 \\ - 14 \\ \hline 13 \end{array}$$

- Start on the right, and move to the left.

⊖ Subtract each digit that is in the same column.

## Subtraction With exchanges


$$\begin{array}{r} 18 \\ - 15 \\ \hline 09 \end{array}$$

The number 18 is written with a red circle around the 8 and a blue circle around the 1. The number 15 is written below it. A horizontal line is drawn under the 5. Below the line, the digits 0 and 9 are written in the tens and ones columns respectively.

- Start on the right, and move to the left.
- Subtract each digit that is in the same column.
- If you cannot subtract (for example,  $4-5$ ), move to the next column and exchange by subtracting 1.
- Bring this into your calculation ( $14-5$ ) and subtract.

## Multiplication vocabulary:

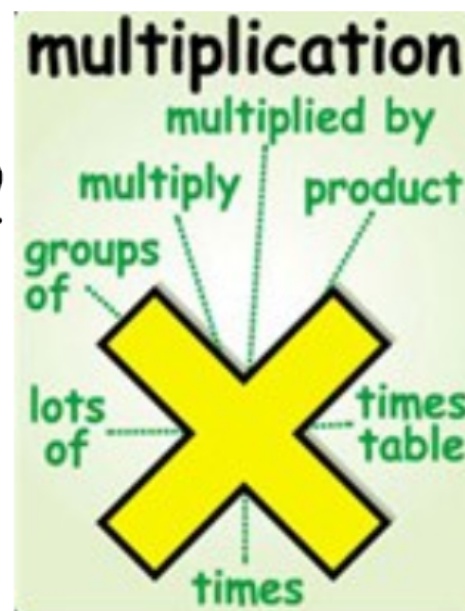
Multiplicand  $\times$  Multiplier = Product

Factor  $\times$  Factor = Multiple

$$5 \times 2 = 10$$

$$56 \times 2 = 112$$

By the end of the year, pupils in Year 2 should know their 0, 1, 2, 5, and 10 times tables facts (multiplication and division).





$$\begin{array}{r} 10 \\ \times 10 \\ \hline \end{array}$$

Multiplication by  
10

$$\begin{array}{r} 31 \\ \times 10 \\ \hline 310 \end{array}$$

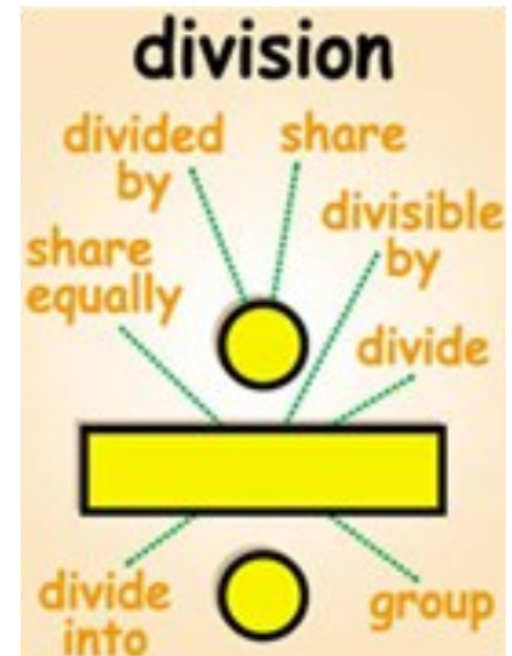
- ⊖ Count the number of 0's in 10
- ⊖ Move each digit the same number of places to the left.
- ⊖ Where required, put placeholder 0's in the columns.

## Division vocabulary:

$$\text{Dividend} \div \text{Divisor} = \text{Quotient}$$
$$10 \div 2 = 5$$

$$56 \div 2 = 28$$

By the end of the year, pupils in Year 2 should know their 0, 1, 2, 5, and 10 times tables facts (multiplication and division).



## Dividing by 10

$$30 \div 10 =$$

A red arrow points from the 0 in 30 to a 3 written below it. The 0 in 10 is underlined in red.

- ⊖ Count the number of 0's in 10
- ⊖ Move each digit the same number of places to the right. The decimal point stays in the same place.

# Fraction vocabulary:

$$\frac{1}{2}$$

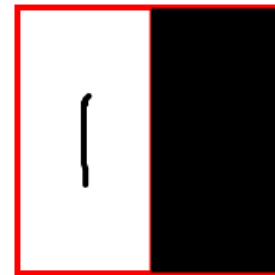


**Numerator**  
The total number  
of parts



**Denominator**  
The number of  
parts that we  
have.

"I have 1 part. My  
numerator is 1."



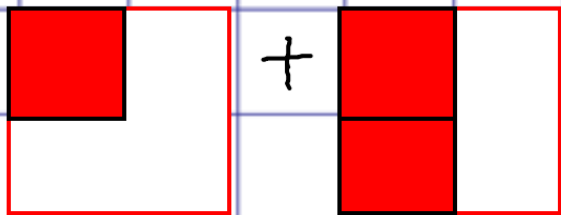
"In total, there are  
2 parts. The  
denominator is 2."

$$\frac{1}{4} + \frac{2}{4} = ?$$

Adding  
Fractions  
(same  
denominators)

$$\frac{1}{4} + \frac{2}{4} = \frac{3}{4}$$

- Add the numerators (the top numbers).
- Leave the denominators (the bottom numbers) the same.



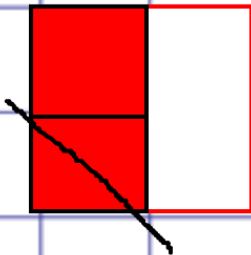
Models and diagrams should be used to assist pupils. Here, we have one quarter and are adding it to two quarters.

$$\frac{2}{4} - \frac{1}{4} = ?$$

Subtracting  
Fractions  
(same  
denominators)

$$\frac{2}{4} - \frac{1}{4} = \frac{1}{4}$$

- Subtract the numerators (the top numbers).
- Leave the denominators (the bottom numbers) the same.



Models and diagrams should be used to assist pupils. Here, we cross out one of the quarters to show it has been subtracted.