

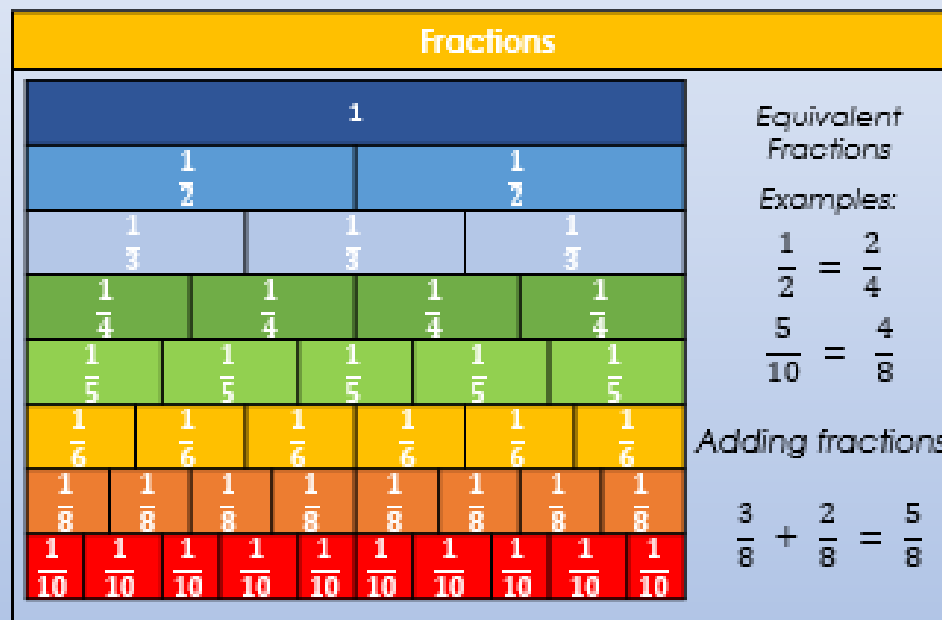


# Helmshore Primary School Year 3 : Maths Knowledge

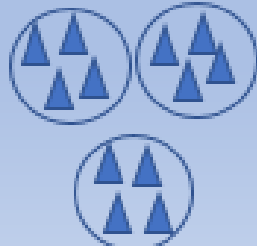
| Counting from 0                                                  |
|------------------------------------------------------------------|
| Counting in multiples of 4<br>0, 4, 8, 12, 16, 20, 24, 28, 32... |
| Counting in multiples of 8<br>0, 8, 16, 24, 32, 40, 48...        |
| Counting in multiples of 50<br>0, 50, 100, 150, 200, 250, 300... |
| Counting in multiples of 100<br>0, 100, 200, 300, 400, 500...    |

| Vocabulary      |                    |
|-----------------|--------------------|
| 100             | hundred            |
| 1000            | thousand           |
| + -<br>x ÷      | inverse operations |
| $\frac{1}{2}$ ← | Numerator          |
| $\frac{1}{2}$ ← | Denominator        |

| Place value | Thousands | Hundreds | Tens | Ones |   | Tenths |
|-------------|-----------|----------|------|------|---|--------|
| 1238        | 1         | 2        | 3    | 8    | . | 0      |
| 58.9        | 0         | 0        | 5    | 8    | . | 9      |
| 3050.4      | 3         | 0        | 5    | 0    | . | 4      |



| Multiplication Tables |    |    |    |
|-----------------------|----|----|----|
| x                     | 3  | 4  | 8  |
| 1                     | 3  | 4  | 8  |
| 2                     | 6  | 8  | 16 |
| 3                     | 9  | 12 | 24 |
| 4                     | 12 | 16 | 32 |
| 5                     | 15 | 20 | 40 |
| 6                     | 18 | 24 | 48 |
| 7                     | 21 | 28 | 56 |
| 8                     | 24 | 32 | 64 |
| 9                     | 27 | 36 | 72 |
| 10                    | 30 | 40 | 80 |
| 11                    | 33 | 44 | 88 |
| 12                    | 36 | 48 | 96 |

| Formal methods of addition, subtraction and short multiplication and division                |                                                                                |                                                                                |                                                                               |                                                                                                         |
|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| 768 + 653 becomes<br>$\begin{array}{r} 768 \\ + 653 \\ \hline 1421 \\ \hline 11 \end{array}$ | 866 - 514 becomes<br>$\begin{array}{r} 866 \\ - 514 \\ \hline 352 \end{array}$ | 934 - 456 becomes<br>$\begin{array}{r} 934 \\ - 456 \\ \hline 478 \end{array}$ | 26 x 4 becomes<br>$\begin{array}{r} 26 \\ \times 4 \\ \hline 104 \end{array}$ | 12 ÷ 3 becomes<br> |



# Helmshore Primary School Year 3 : Maths Knowledge

## Time – Knowledge

### 24 hour clocks



The time is 10.10 in the morning or 22.10 in the evening in 24 hour time.

### Roman numerals



This clock is showing X to II or 10 to 2.  
On some clocks the 4 is IIII and sometimes it is IV

**a.m.** is from **midnight** until mid-day (noon)  
1 to 12 in 24 hour clock time

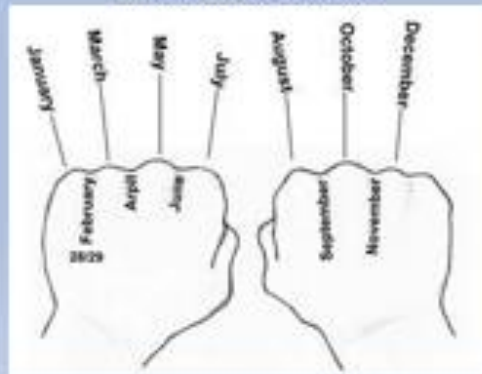
**p.m.** is from mid-day (**noon**) until midnight  
13 to 24 in 24 hour clock time

There are 365 days in a year.

A leap year has 366 days. This is February 29<sup>th</sup> and happens every 4 years.

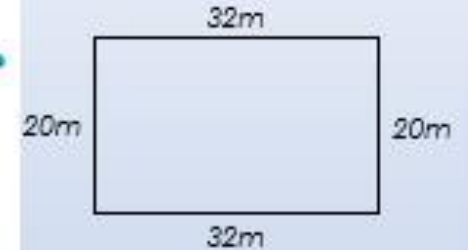
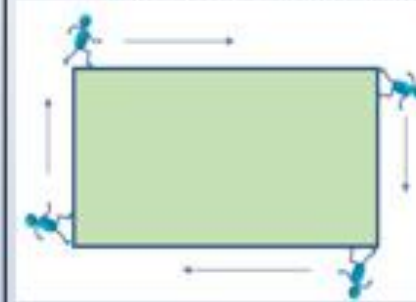
|           |         |
|-----------|---------|
| January   | 31 days |
| February  | 28 days |
| March     | 31 days |
| April     | 30 days |
| May       | 31 days |
| June      | 30 days |
| July      | 31 days |
| August    | 31 days |
| September | 30 days |
| October   | 31 days |
| November  | 30 days |
| December  | 31 days |

### 'Knuckle Mnemonic'



## Perimeter

Perimeter is the distance around a 2D shape



## Non symmetrical (irregular) polygons

| Polygon/Shape | Regular | Irregular |
|---------------|---------|-----------|
| Triangle      |         |           |
| Quadrilateral |         |           |
| Pentagon      |         |           |
| Hexagon       |         |           |
| Heptagon      |         |           |
| Octagon       |         |           |

## Lines



Parallel



Perpendicular

## Angles

