

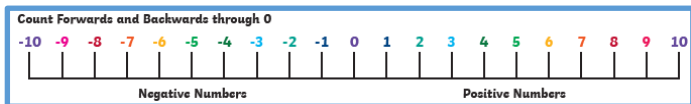
# Key Facts for Year 5 - These are key facts the children are expected to know by the end of Year 5 in addition to the key facts from previous years.

## Number and Place Value

- Know place value of each digit in numbers to 1,000,000
- Count forwards and backwards in powers of 10
- Read Roman numerals to 1000

**Roman Numerals to 1000**

I = ONE  
V = five  
X = ten  
L = fifty  
C = hundred  
D = five hundred  
M = thousand



## Number – Multiplication and Division

- All factor pairs of a number
- Common factors of 2 numbers
- Prime numbers to 19
- Square numbers (2)
- Cube numbers(3)

### Factors and Multiples

A multiple is a number that can be divided evenly by a given number.

For example,  $12 \times 1 = 12$ ,  
 $12 \times 2 = 24$ ,  $12 \times 3 = 36$

The multiples of 12 include: 12, 24, 36, 48...

A factor is a number that is multiplied by another number to get a product.

For example,  $12 \div 1 = 12$ ,  
 $12 \div 2 = 6$ ,  $12 \div 3 = 4$

The factors of 12 are: 1, 2, 3, 4, 6 and 12.

### Square and Cube Numbers

|                           |                                      |
|---------------------------|--------------------------------------|
| $1^2 1 \times 1 = 1$      | $1^3 1 \times 1 \times 1 = 1$        |
| $2^2 2 \times 2 = 4$      | $2^3 2 \times 2 \times 2 = 8$        |
| $3^2 3 \times 3 = 9$      | $3^3 3 \times 3 \times 3 = 27$       |
| $4^2 4 \times 4 = 16$     | $4^3 4 \times 4 \times 4 = 64$       |
| $5^2 5 \times 5 = 25$     | $5^3 5 \times 5 \times 5 = 125$      |
| $6^2 6 \times 6 = 36$     | $6^3 6 \times 6 \times 6 = 216$      |
| $7^2 7 \times 7 = 49$     | $7^3 7 \times 7 \times 7 = 343$      |
| $8^2 8 \times 8 = 64$     | $8^3 8 \times 8 \times 8 = 512$      |
| $9^2 9 \times 9 = 81$     | $9^3 9 \times 9 \times 9 = 729$      |
| $10^2 10 \times 10 = 100$ | $10^3 10 \times 10 \times 10 = 1000$ |
| $11^2 11 \times 11 = 121$ | $11^3 11 \times 11 \times 11 = 1331$ |
| $12^2 12 \times 12 = 144$ | $12^3 12 \times 12 \times 12 = 1728$ |

### Prime Numbers

A natural number greater than 1 with no divisors other than 1 and itself.

|    |    |    |    |    |    |    |    |    |     |
|----|----|----|----|----|----|----|----|----|-----|
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10  |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20  |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30  |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40  |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50  |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60  |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70  |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80  |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90  |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

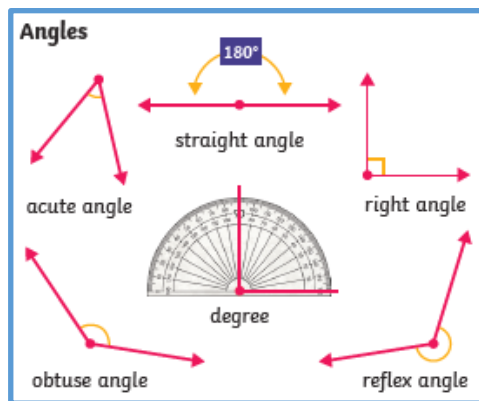
## Measurement

- Conversion between metric and imperial:
  - cms to inches
  - kilograms to pounds
  - litres to pints
- Area of a rectangle = length x height in  $cm^2$  and  $m^2$

|   |  |   |
|---|--|---|
| <p><b>Length</b></p> <p>1 kilometre - 1000 metres</p> <p>1 metre - 100 centimetres</p> <p>1 centimetre - 10 millimetres</p> <p>1 kilometre - 0.62 miles</p> <p>1 metre - 1.09 yards</p> <p>1 metre - 3.28 feet</p> <p>1 centimetre - 0.39 inches</p> <p>1 foot - 12 inches</p> <p>1 yard - 3 feet</p> | <p><b>km</b><br/><b>m</b><br/><b>cm</b><br/><b>mm</b></p> <p><b>km</b><br/><b>m</b><br/><b>yd</b><br/><b>ft</b></p> <p><b>cm</b><br/><b>in</b><br/><b>ft</b><br/><b>yd</b></p> | <p><b>Capacity</b></p> <p>1 litre - 1000 millilitres</p> <p>1 centilitre - 10 millilitres</p> <p>1 litre - 35.19 fluid ounces</p> <p>1 litre - 1.75 pints</p> <p>1 litre - 0.21 gallons</p> <p>1 gallon - 8 pints</p> <p><b>l</b><br/><b>cl</b><br/><b>ml</b></p> <p><b>l</b><br/><b>fl oz</b><br/><b>pt</b><br/><b>gal</b></p> |
|---|--|---|

## Geometry

- Identify acute, obtuse and reflex angles
- Angle at a point and whole turn =  $360^\circ$
- Angle at a point on a straight line and half turn =  $180^\circ$



## Fractions

- Identify proper and improper fractions
- Recognise %
- Know percentage and decimal equivalents of  $\frac{1}{2}$ ,  $\frac{1}{4}$ ,  $\frac{1}{5}$ ,  $\frac{2}{5}$ ,  $\frac{4}{5}$



### Mixed Numbers

Mixed numbers contain a whole number and a fraction.

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

$2 \frac{1}{4}$  is a mixed number.

The whole number is 2.

The fraction is  $\frac{1}{4}$ .

### Improper Fractions

An improper fraction is a fraction where the numerator is greater than or equal to the denominator.

$$\frac{5}{3}$$

← numerator

← denominator

