Multiplication and division vocabulary

| Term | Definition | Example |
| :---: | :---: | :---: |
| factor | a number that divides exactly into another number | factors of $12=$ $1,2,3,4,6,12$ |
| prime number | a number with only 2 factors: 1 and itself | $2,3,5,7,11,13,17,19 \ldots$ |
| composite number | a number with more than two factors | (it has 6 factors) |
| prime factor | a factor that is prime | prime factors of $12=$ 2, 3 |
| multiple | a number in another number's times table | multiples of $9=$ 9, 18, 27, 36... |
| square numbers | the result when a number has been multiplied by itself | $\begin{aligned} & 25\left(5^{2}=5 \times 5\right) \\ & 49\left(7^{2}=7 \times 7\right) \end{aligned}$ |
| cube numbers | the result when a number has been multiplied by itself 3 times | $\begin{gathered} 8\left(2^{3}=2 \times 2 \times 2\right) \\ 27\left(3^{3}=3 \times 3 \times 3\right) \end{gathered}$ |

Volume = the amount of space a 3D shape takes up, usually measured in $\mathrm{cm}^{3}$ or $\mathrm{m}^{3}$
Count all cubes $=12 \mathrm{~cm}^{3}$
Perimeter- the distance around a shape measured in $\mathrm{mm}, \mathrm{cm}, \mathrm{m}$ or km (add it up) $3+4+7+4+10+8=36 \mathrm{~cm}$

Area- the amount of space inside a shape measured in $\mathrm{cm}^{2}$ or $\mathrm{m}^{2}$ Length $x$ width

$3 \mathrm{~cm} \times 2 \mathrm{~cm}=6 \mathrm{~cm}^{2}$


## Roman numerals

| 1 | I | 100 | C |
| :---: | :---: | :---: | :---: |
| 5 | V | 500 | D |
| 10 | X | 1000 | M |
| 50 | L |  |  |

## 2D shapes

| Name | No. of sides |
| :---: | :---: |
| quadrilateral | 4 |
| pentagon | 5 |
| hexagon | 6 |
| heptagon | 7 |
| octagon | 8 |
| nonagon | 9 |
| decagon | 10 |

polygon = shape with straight sides regular = all sides/angles the same irregular = sides/angles not same


Scalene= all angles and sides are
different sizes
Equilateral= all angles and sides are the same size
Isosceles= 2 angles and sides are the same size, one is different
Right angled triangle= one of the angles meets at $90^{\circ}$

parallelogram trapezium rhombus
Parallelogram- 2 sets of parallel lines
Trapezium- 1 set of parallel lines
Rhombus- 4 equal sides, 2 obtuse, 2 acute angles and 2 sets of parallel lines

| Measurement conversions |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | Days | Length |  |
| January | 31 | 10 mm | 1 cm |
| February | 28 (29 in leap year) | 100 cm | 1 m |
| March | 31 | 1000m | 1 km |
| April | 30 | Mass |  |
| May | 31 | 1000g | 1kg |
| June | 30 | Liquid |  |
| July | 31 | 1000ml | 1L |
| August | 31 | Money |  |
| September | 30 | 100p | £1 |
| October | 31 | Imperial to Metric |  |
| November | 30 | 1 inch (length) | 2.5 cm |
| December | 31 | 1 foot (length) | 30 cm |
| 1 year $=365$ days ( $\approx 52$ weeks) <br> Leap year $=366$ days |  | 2.2 pounds (weight) | 1 kg |
|  |  | 1.75 pints (liquid) | 1 litre |


| Co-ordinates <br> Read co-ordinates along the x axis <br> (horizontal) first, then the y axis <br> (vertical). E.g. (3,4) = go right 3, up 4. |
| :---: |
| Shape vocabulary |
| horizontal |
| vertical line |
| (at right angles) |


| Fractions, decimals \& percentages |  |  |  |
| :---: | :---: | :---: | :---: |
| Percentage means 'out of 100'/100 |  |  |  |
| 1/100 | 0.01 | 1\% | $\div 100$ |
| $1 / 20$ | 0.05 | 5\% | $\div 20$ |
| $1 / 10$ | 0.1 | 10\% | $\div 10$ |
| $1 / 5$ | 0.2 | 20\% | $\div 5$ |
| 1/4 | 0.25 | 25\% | $\div 4$ |
| 1/2 | 0.5 | 50\% | $\div 2$ |
| 3/4 | 0.75 | 75\% | $\div 4, \mathrm{x} 3$ |
| 1 | 1 | 100\% | $\div 1$ |

## Angles

right angle: exactly $90^{\circ}$
 less than 90

## A reflex angle is an angle



YEAR 5 MATHS KNOWLEDGE ORGANISER

