## Graduation Numeracy Reference Pages

Pythagorean Theorem
$c^{2}=a^{2}+b^{2}$


| Geometric Figure | Perimeter | Area | KEY LEGEND |
| :---: | :---: | :---: | :---: |
| Rectangle | $P=2 l+2 w$ <br> or $P=2(l+w)$ | $A=l w$ | $\begin{aligned} & l=\text { length } \\ & w=\text { width } \\ & b=\text { base } \\ & h=\text { height } \end{aligned}$ |
| Triangle | $P=a+b+c$ | $A=\frac{b h}{2}$ | $\begin{aligned} & s=\text { slant height } \\ & r=\text { radius } \\ & d=\text { diameter } \\ & P=\text { perimeter } \end{aligned}$ |
| Circle | $C=\pi d$ <br> or $C=2 \pi r$ | $A=\pi r^{2}$ | $\begin{aligned} & C=\text { circumference } \\ & A=\text { area } \\ & S A=\text { surface area } \\ & V=\text { volume } \end{aligned}$ |


| Geometric Solid | Surface Area | Volume |
| :--- | :--- | :--- |
| Cylinder | $A_{\text {top }}=\pi r^{2}$ <br> $A_{\text {base }}=\pi r^{2}$ <br> $A_{\text {side }}=2 \pi r h$ <br> $S A=2 \pi r^{2}+2 \pi r h$ | $V=$ (area of base) $\times h$ |
| Square-based Pyramid | $A_{\text {triangle }}=\frac{1}{2} b s$ <br> $A_{\text {base }}=b^{2}$ <br> $S A=2 b s+b^{2}$ | $V=\frac{1}{3} \times$ (area of base) $\times h$ |
| Rectangular Prism | $S A=w h+w h+l w+l w+l h+l h$ <br> or <br> $S A=2(w h+l w+l h)$ | $V=$ (area of base) $\times h$ |
| General Right Prism | $S A=$ the sum of the areas <br> of all the faces | $V=$ (area of base) $\times h$ |
| General Right Pyramid | $S A=$ the sum of the areas <br> of all the faces | $V=\frac{1}{3} \times$ (area of base) $\times h$ |



## Graduation Numeracy Reference Pages



RATES OF CHANGE



Equation of a line:
$y=m x+b$
$\mathrm{A} x+\mathrm{B} y+\mathrm{C}=0$
$y-y_{1}=m\left(x-x_{1}\right)$

Rate of change (slope) of a line:
$m=\frac{\text { rise }}{\text { run }}=\frac{\Delta y}{\Delta x}=\frac{y_{2}-y_{1}}{x_{2}-x_{1}}$

$$
\text { speed }=\frac{\text { distance }}{\text { time }}
$$

## Graduation Numeracy Reference Pages

| Unit | Symbol |
| :--- | :---: |
| kilometre | km |
| metre | m |
| centimetre | cm |
| millimetre | mm |
| tonne (metric ton) | t |
| gram | g |
| kilogram | kg |
| microgram | $\mu \mathrm{g}$ |
| litre | L |
| millilitre | mL |


| Conversions |  |
| :--- | :--- |
| Length | $1 \mathrm{~km}=1000 \mathrm{~m}$ <br> $1 \mathrm{~m}=100 \mathrm{~cm}$ <br> $1 \mathrm{~cm}=10 \mathrm{~mm}$ |
| Mass | $1 \mathrm{t}=1000 \mathrm{~kg}$ <br> $1 \mathrm{~kg}=1000 \mathrm{~g}$ <br> $1 \mathrm{~g}=1000000 \mathrm{\mu g}$ |
| Volume | $1 \mathrm{~L}=1000 \mathrm{~cm}^{3}$ <br> $1 \mathrm{~L}=1000 \mathrm{~mL}$ |



## Graduation Numeracy Reference Pages



## 12-Month Calendar

| JANUARY |  |  |  |  |  |  | FEBRUARY |  |  |  |  |  |  | MARCH |  |  |  |  |  |  | APRIL |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SU | MO | TU | WE | TH | FR | SA | SU | MO | TU | WE | TH | FR | SA | SU | MO | TU | WE | TH | FR | SA | SU | MO | TU | WE | TH | FR | SA |
|  | 1 | 2 | 3 | 4 | 5 | 6 |  |  |  |  | 1 | 2 | 3 |  |  |  |  | 1 | 2 | 3 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7 | 8 | 9 | 10 | 11 | 12 | 13 | , | 5 | 6 | 7 |  | 9 | 10 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 28 | 29 | 30 | 31 |  |  |  | 25 | 26 | 27 | 28 |  |  |  | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 29 | 30 |  |  |  |  |  |
| MAY |  |  |  |  |  |  | JUNE |  |  |  |  |  |  | JULY |  |  |  |  |  |  | AUGUST |  |  |  |  |  |  |
| SU | MO | TU | WE | TH | FR | SA | SU | MO | TU | WE | TH | FR | SA | SU | MO | TU | WE | TH | FR | SA | SU | MO | TU | WE | TH | FR | SA |
|  |  | 1 | 2 | 3 | 4 | 5 |  |  |  |  |  | 1 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |  |  | 1 | 2 | 3 | 4 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 27 | 28 | 29 | 30 | 31 |  |  | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 29 | 30 | 31 |  |  |  |  | 26 | 27 | 28 | 29 | 30 | 31 |  |
| SEPTEMBER |  |  |  |  |  |  | OCTOBER |  |  |  |  |  |  | NOVEMBER |  |  |  |  |  |  | DECEMBER |  |  |  |  |  |  |
| SU | MO | TU | WE | TH | FR | SA | SU | MO | TU | WE | TH | FR | SA | SU | MO | TU | WE | TH | FR | SA | SU | MO | TU | WE | TH | FR | SA |
|  |  |  |  |  |  | 1 |  | 1 | 2 | 3 | 4 | 5 | 6 |  |  |  |  | 1 | 2 | 3 |  |  |  |  |  |  | 1 |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 | 28 | 29 | 30 | 31 |  |  |  | 25 | 26 | 27 | 28 | 29 | 30 |  | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 30 | 31 |  |  |  |  |  |

24-Hour Clock


Time
1 year $\approx 365$ days
1 year $\approx 52$ weeks

