Maths Key Skills
Name:

\begin{tabular}{|c|c|c|c|c|c|c|}
\hline A: Number \& Algebra \& \& \multicolumn{2}{|l|}{B: Proportion, Geometry \& Measure} \& \multicolumn{3}{|l|}{C: Statistics \& Probability} \\
\hline 1. Insert one of these symbols in the box: \(\quad=<>\geq\) \& \[
\begin{aligned}
\& 7: 1 \\
\& 0.3>0.25
\end{aligned}
\] \& 11. Reduce to its lowest form:
\[
2 \mathrm{~cm}: 32 \mathrm{~mm}
\] \& \[
\begin{gathered}
7: 15 \\
20: 32 \\
5: 8
\end{gathered}
\] \& \multicolumn{2}{|l|}{21. Write down the probability of getting a factor of 6 on a dice} \& \(7: 27\)
\(\frac{4}{6}=\frac{2}{3}\) \\
\hline 2. Which is bigger?
\[
0.07 \text { or } 70 \%
\] \& \[
\begin{aligned}
\& 7: 2 \\
\& 70 \%
\end{aligned}
\] \& 12. Divide 96 sweets in a ratio of 3:5 Give the answer as a ratio. \& \[
\begin{aligned}
\& 7: 16 \\
\& \text { 36:60 }
\end{aligned}
\] \& \multicolumn{2}{|l|}{\begin{tabular}{l}
\[
\begin{aligned}
\text { 22. Set } A \& =\{1,2,3,4,6,12\} \\
\text { Set } B \& =\{3,6,9,12\}
\end{aligned}
\] \\
Complete the Venn diagram
\end{tabular}} \& \multirow[t]{3}{*}{} \\
\hline 3. Give the HCF of 16 and 24. \& \(7: 3\)

8 \& 13. Express $£ 30$ as a percentage of $£ 20$. \& $$
\begin{array}{|l|}
\hline 7: 17 \\
\mathbf{1 5 0 \%}
\end{array}
$$ \& \multicolumn{2}{|l|}{} \& \\

\hline 4. Insert one of these symbols in the box: $\quad=<>\geq$ \& $$
\sqrt[7: 4]{\sqrt[3]{64}<3^{2}}
$$ \& 14. Reflect the rectangle in $y=x$. \&  \& \multicolumn{2}{|l|}{} \& \\

\hline 5. Work out \& simplify :

$$
1 \frac{2}{3} \times 1 \frac{1}{4}
$$ \& \[

\frac{25}{12}=2 \frac{1}{12}
\] \& 15. Use standard convention to show the equal sides \& angles of this equilateral triangle. \&  \& \multicolumn{2}{|l|}{23. 72 students were asked for their favourite leisure activity. The results are shown in the pie chart.} \& 7:29 \\

\hline 6. Work out: $5+3^{2}-6 \times 4$ \& \[
$$
\begin{array}{r}
\text { 7:7 } \\
\hline-10
\end{array}
$$

\] \& 16. Sketch the plan view. \& \[

$$
\begin{aligned}
& 7: 21 \\
& \square \\
& \hline
\end{aligned}
$$

\] \& \multicolumn{2}{|l|}{} \& \[

$$
\begin{gathered}
60^{\circ} \div 5 \\
=12
\end{gathered}
$$
\] \\

\hline 7. Expand \& simplify:

$$
3(2 x+3)-5 x
$$ \& \[

$$
\begin{gathered}
7: 10 \\
6 x+9-5 x \\
\mathbf{x + 9}
\end{gathered}
$$

\] \& 17. The area of this trapezium is $21 \mathrm{~m}^{2}$. Work out height? \& \[

$$
\begin{array}{r}
7: 22 \\
3 m
\end{array}
$$

\] \& \multicolumn{2}{|r|}{} \& \[

=12
\] \\

\hline 8. Evaluate: $\mathrm{a}^{2}-\mathrm{b}$ when $\mathrm{a}=-2, \mathrm{~b}=-3$ \& \[
4+3=7

\] \& 18. Give the number of edges, vertices and faces in a cone. \& \[

$$
\begin{array}{|rl|}
\hline 7: 23 \mathrm{E}=1 \\
\mathrm{~V}=1 \\
\mathrm{~F}=2
\end{array}
$$

\] \& \multicolumn{2}{|l|}{24. Work out the range of scores from the table below.} \& \[

$$
\begin{aligned}
& 7: 30 \\
& 19-15=4
\end{aligned}
$$
\] \\

\hline \multirow[t]{3}{*}{9. Give the equation of the graph.} \& \multirow[t]{3}{*}{$$
y=-3
$$} \& \multirow[t]{3}{*}{19. Work out the surface area of this cuboid.} \& \multirow[t]{3}{*}{\[

$$
\begin{gathered}
7: 24 \\
2(10+10+4) \\
\mathbf{4 8} \mathbf{m}^{\mathbf{2}}
\end{gathered}
$$
\]} \& \multicolumn{2}{|l|}{25. Work out the modal score.} \& \multirow[t]{3}{*}{7:30} \\

\hline \& \& \& \& Score \& Frequency \& \\
\hline \& \& \& \& 15 \& 7 \& \\
\hline 10. Solve: $2(2 x-3)=4$ \& \& 20. $x=38^{0}$. Give the reason. \& 7:25 \& 17 \& 12 \& \multirow[t]{4}{*}{16} \\
\hline \& 4x-6=4 \& $\longrightarrow$ \& \multirow[t]{3}{*}{Alternate angles are equal} \& 18 \& 8 \& \\
\hline \& $4 \mathrm{x}=10$ \& x/380 \& \& 19 \& \multirow[t]{2}{*}{5} \& \\
\hline \& $\mathrm{x}=2.5$ \&  \& \& \& \& \\
\hline Total (A) \& \& Total (B) \& \& \multicolumn{2}{|r|}{Total (C)} \& \\
\hline Test Total ( $\mathrm{A}+\mathrm{B}+\mathrm{C}$ ) \& \& R (0-9) \& \multicolumn{2}{|c|}{$Y$ (10-19)} \& \multicolumn{2}{|l|}{G (20-25)} \\
\hline
\end{tabular}

