Exam Style Questions

**Estimation**

Ensure you have: Pencil, pen, ruler, protractor, pair of compasses and eraser
You may use tracing paper if needed

**Guidance**

1. Read each question carefully before you begin answering it.
2. Don’t spend too long on one question.
3. Attempt every question.
4. Check your answers seem right.
5. Always show your workings

**Revision for this topic**

*Secondary*

*Video 215*
1. Estimate 2.9 x 401

2. Work out an estimate for the value of 7.1 x 97

3. Estimate the value of

\[
\frac{908}{2.03}
\]

4. Stuart buys 72 packets of crisps at 19p each. Estimate the total cost.

£ .................  
(2)
5. Work out an estimate for

\[
\begin{array}{c}
58.8 \\ \times \\
20.9 \\
\hline \\
101.4 \\
\end{array}
\]

6. Estimate the total cost of 31 televisions at £196.50 each and 19 DVD players at £50.99 each.

Show clearly how you obtained your answer.

\[
\begin{array}{c}
31 \\ \times \\
398 \\
\hline \\
61 \\
\end{array}
\]

Show clearly how you obtained your answer.
8. Estimate the value of \( 9.03 + 19.87 \times 3.11 - 4.97 \)
You must show your working.

\[ \allowbreak \]
\[ \allowbreak \]
\[ \] \[ (3) \]

9. Work out an estimate for
\[ \frac{31.1 \times 19.4}{3.98 \times 5.04} \]

\[ \allowbreak \]
\[ \allowbreak \]
\[ \] \[ (3) \]

10. Estimate the value of
\[ \frac{702.1 + 299.3}{1.9 \times 5.1} \]

\[ \allowbreak \]
\[ \allowbreak \]
\[ \] \[ (3) \]
11. Work out an estimate for
\[
\frac{20.2 \times 698.1}{19.8 \times 5.3}
\]

12. Estimate the answer to
\[
\frac{8.7 \times 20.3}{8.898 - 6.01}
\]

13. In a theatre there are 29 rows and in each row there are 32 seats. Each ticket costs £19.75

Work out an estimate for the total income from ticket sales.

£.................

(3)
14. Estimate how many books costing $7.05 can be bought for $424

(2)

15. Work out an estimate for

\[
\begin{array}{c}
203 \times 9.93 \\
\hline \\
0.511 \\
\end{array}
\]

(3)

16. Use approximations to estimate the value of

\[
\begin{array}{c}
4.12 \times 1.89 \\
\hline \\
0.21 \\
\end{array}
\]

(3)
17. Work out an estimate for \( \frac{(5.14)^2}{0.398} \)

\[ \frac{26.4196}{0.398} = 66.36 \]

18. Work out an estimate for \( \frac{4.086 \times 2.992}{0.192} \)

\[ \frac{12.186528}{0.192} = 64.07 \]

19. Use approximations to estimate the value of \( \frac{596.4 \times 2.06}{0.521} \)

\[ \frac{1215.364}{0.521} = 2338.5 \]
20. Write down an estimate for $\sqrt{20}$

21. Write down an estimate for $\sqrt{51}$

22. Write down an estimate for $\sqrt{78}$

23. Write down an estimate for $\sqrt[3]{30}$
24. Estimate

\[
\frac{594 \times 4.03}{0.396}
\]

25. Use approximations to estimate the value of

\[
\sqrt{\frac{50.77}{0.513}}
\]

You must show your working.

26. Estimate the value of

\[
\frac{803 \times 2.97}{0.613}
\]