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| AS.CHEM1.2.002 26-Aug-15 © Ripon Grammar School / RWGrime  **SIGNIFICANT FIGURES & STANDARD FORM**  Name ………………………………………….………………………………. Form …………………. |  |

Significant Figures

You need to be able to quote answers to the correct number of significant figures.

1) Write the following numbers to the quoted number of significant figures.

a) 345789 4 sig figs ………………… d) 6 3 sig figs ………………….

b) 297300 3 sig figs ………………… e) 0.001563 3 sig figs ………………….

c) 0.07896 3 sig figs ………………… f) 0.01 4 sig figs ………………….

2) Complete the following sums and give the answers to 3 significant figures.

a) 6125 x 384 ………………… d) 750 ÷ 25 ………………….

b) 25.00 x 0.01 ………………… e) 0.000152 x 13 ………………….

c) 13.5 + 0.18 ………………… f) 0.0125 x 0.025 ………………….

Standard Form

You need to be able to work with numbers in standard form.

3) Write the following numbers in non standard form.

a) 1.5 x 10-3 ………………….. d) 0.0534 x 104  ……………………

b) 0.046 x 10-2 ………………...... e) 10.3 x 105 ……………………

c) 3.575 x 105 ………………...... f) 8.35 x 10-3 ……………………

4) Write the following numbers in standard form.

a) 0.000167 ………………….. d) 34500 ……………………

b) 0.0524 ………………...... e) 0.62 ……………………

c) 0.000000015………………...... f) 87000000……………………

5) Complete the following calculations and give the answers to 3 significant figures.

a) 6.125 x 10-3 x 3.5 …………………………………………………………..

b) 4.3 x 10-4 ÷ 7.0 …………………………………………………………..

c) 4.0 x 108 + 35000………………...........................................................

d) 0.00156 + 2.4 x 103 ………………………………………………………….

e) 6.10 x 10-2 – 3.4 x 10-5 ………………………………………………………….

f) 8.00 x 10-3 x 0.100 x 10-3 ………………………………………………………….