

Name _____

Date _____

Due Date _____

Mark _____/20

Correct and Hand in Again by _____**Chemistry 11****Hand In Assignment # 2 – Significant Digits****This Assignment will be marked and you are allowed to do one set of corrections.**

1. Give the number of significant digits in each of the following. Assume they are all measurements. (6 marks)

a) 0.00230 _____ d) 3.2000×10^{-4}

b) 3900 000 _____ e) 500 020.0

c) 1.002×10^5 _____ f) 345

2. Perform the following calculations and round the answers off to the correct number of significant digits as justified by the data. Assume all numbers are measurements. (10 marks)

a) 2.15×0.0034 _____ f) $8.99 \times 10^3 \div 4.600 \times 10^{-8}$ b) $0.02 + 344.731$ _____ g) $89.000 \div 1.230 \times 10^2$ c) $4.555 \times 10^6 \div 2 \times 10^{-2}$ _____ h) $98.0076 - 2.19$ d) $(3.63 \times 9.02) + 13.923$.. _____ i) 0.000020×245.912 e) $3.213 + 98.37 + 2.619$.. _____ j) $5.002 \div 5.21 + 2.31 \div 9.225$

3. Round the following numbers to 2 significant digits. (4 marks)

a) 2 000 000 _____ c) 3.8945×10^{28}

b) 105 000 _____ d) 0.000 000 4895