

WS 2.1 Significant figures!

Name: _____ P. _____

1. Round/rewrite each number so that it has 3 significant figures, and then 2 significant figures. Only use scientific notation if it is necessary for expressing the correct number of sig. figs.

Number	with 3 sig. figs.	with 2 sig. figs.
900	_____	_____
60000	_____	_____
61111	_____	_____
0.03	_____	_____
5600	_____	_____
1300.9821	_____	_____
302.1999999	_____	_____
822.222	_____	_____
0.0603779	_____	_____
5000	_____	_____
7481	_____	_____
7401	_____	_____
2.3790	_____	_____
3000	_____	_____

2. Complete the following calculations, and then round/rewrite the answer with the correct number of sig. figs.

	Calculator answer	With correct s.f.
78.3 x 1.42	<u>111.186</u>	_____
6.78 x 2.3	<u>15.594</u>	_____
28.71 / 25.2	<u>1.139286</u>	_____
48.82 / 24.41	<u>2</u>	_____
60. / 0.0100	<u>6000</u>	_____

3. Complete the following calculations, and then round/rewrite the answer with the correct number of sig. figs.

	Calculator answer	With correct s.f.
35.12 + 2.3	<u>37.42</u>	_____
6.3 + 3.7	<u>10</u>	_____
6.8 + 102	<u>108.8</u>	_____
16.387 - 1.2	<u>15.187</u>	_____

4. Complete the following calculations, and then round/rewrite the answer with the correct number of sig. figs.

	Calculator answer	With correct s.f.
9.382 x 27.1	_____	_____
341.1 + 17.32	_____	_____
0.029 / 0.027	_____	_____
25.25 + 11.75	_____	_____
96.2 x 114.11115 x 0.000033381	<u>0.3664397</u>	_____
414 + 16	_____	_____
112.21 - 103.41	_____	_____
112.21 / 103.41	_____	_____
46 + 82	_____	_____
46 x 82	_____	_____

5. Formula Writing Review. Fill in the missing name/formula for each compound. Be sure to name the compound according to the correct system (ionic or covalent).

lithium thiosulfate _____

cobalt arsenate _____

CoBr_2 _____

SBr_2 _____

NO _____

BaO _____

PbO _____

Chromium IV oxide _____

Strontium hypochlorite _____

dinitrogen pentoxide _____

triboron heptasulfide _____

Br_2O _____

Ag_2O _____

SiH_4 _____

CS_2 _____

ammonium phosphate _____

bismuth dichromate _____

MnPO_4 _____

6. Each chemical equation below shows two elements reacting to form a compound. For each reaction:

a) classify the compound that forms as ionic or covalent.

b) name the compound that forms.

c) state whether the each reacting element will need to gain, lose, or share electrons to bond in the compound.

d) If electrons are lost or gained, indicate which element will gain electrons and which will lose electrons.



a. _____

b. _____



a. _____

b. _____