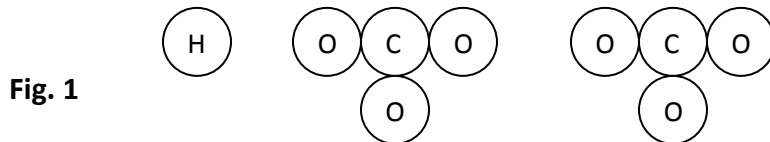
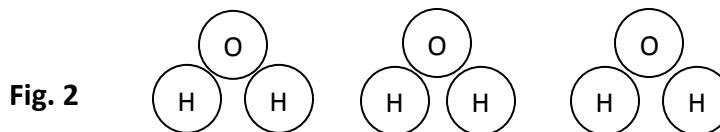


## Counting Atoms Worksheet

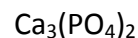
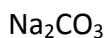
Chemical formulas consist of element symbols and numbers that indicate how many atoms of each element are present. For example in the molecule  $C_3H_8$ , there are **3** Carbon atoms and **8** Hydrogen atoms. In  $CO_2$ , there is **1** Carbon atom (we don't write the <sub>1</sub> in the chemical formula) and **2** Oxygen atoms. For an example of when parenthesis are involved, please see **Fig. 1** for the pictorial representation of  $H(CO_3)_2$ . As you can see there is **1** Hydrogen atom, **2** Carbon atoms, and **6** Oxygen atoms.



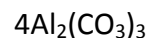
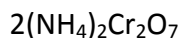
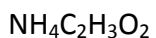
When there is a number in front of the compound, that indicates how many molecules of a compound there is. For example,  $3H_2O$  means there are 3 molecules of  $H_2O$ . See **Fig. 2** for the pictorial representation of  $3H_2O$ . As you can see, there are **3** Oxygen atoms and **6** Hydrogen atoms.



Please complete the following charts.



Type of Atom	# of Atoms	Type of Atom	# of Atoms	Type of Atom	# of Atoms
Total		Total		Total	



Type of Atom	# of Atoms	Type of Atom	# of Atoms	Type of Atom	# of Atoms
Total		Total		Total	