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When writing the chemical formula of chemical compounds it is important to get the elements in the right order.

One way to do this is to follow three simple steps that work most of the time in junior science using the periodic table shown above.

Step1 - the first element in the formula is the element that appears in the lowest, left side of the periodic table.

Step 2 - the last element is the one that appears on the highest point at the right side of the table.

Step 3 – elements in between the first and last element are written in the order as they appear in the periodic table.

Eg 1 Write the chemical formula for the smallest particle of an unknown compound that contains 3

atoms of oxygen, 1 atom of sodium and one atom of carbon. Step 1 since sodium is the element that is most left on the periodic table Na is written first.

Na

Step 2 Oxygen is written last as it is the element that appears on the top right of the table.

Step 3 Carbon is written in between Na and O as it appears on the periodic table.

Na₂ CO₃

Eg 2 Write the chemical formula for the smallest particle of an unknown compound that contains 2 atoms of bromine and 1 atom of cobalt.

Step 1 the left most element in this case is cobalt (Co) .

Co

Step 2 bromine is written last as it is the element that appears on the top-right most side of the table.



CoBr₂

Eg 3 Write the chemical formula for the smallest particle of an unknown compound that contains

1 atom of cobalt, 1 atom of titanium and 3 oxygen atoms. Step 1 the left most element in this case is cobalt (Co).

Co

Step 2 oxygen is written last as it is the element that appears on the top-right most side of the table.

Step 3 titanium is written in between Co and O, as it appears on the periodic table.

CoTiO₃

Eg 4 Write the chemical formula for the smallest particle of an unknown compound that contains

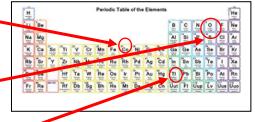
1 atom of chlorine, 1 atom of fluorine and 3 oxygen atoms. Step 1 since there is no element on the left of the periodic table we start at the right and select the lowest element present.

CI

Step 2 fluorine is written last as it is the element that appears on the top-right most side of the table.

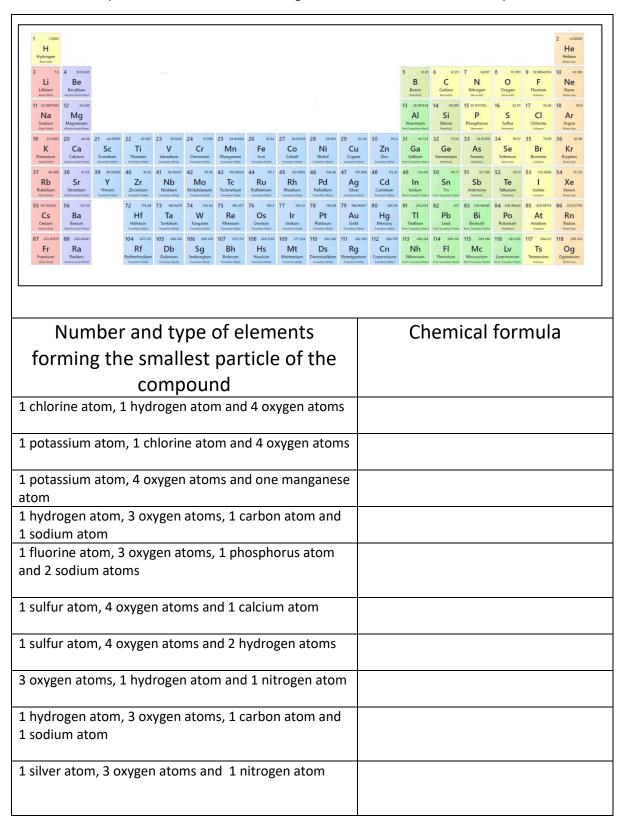
Step 3 oxygen is written in between Cl and F, as it appears on the periodic table.

CIFO₃



Writing formulae worksheet – which element goes first and what order?

Use the periodic table to assist in writing the correct formula for each compound



1 barium atom, 3 oxygen atoms and 1 carbon atom 1 nitrogen atom, 2 oxygen atoms, 3 hydrogen atoms, and 1 chlorine atom 1 oxygen atoms, 2 potassium atom, and 2 chromium atoms 3 oxygen atoms, 1 lithium atom, and 1 chlorine atom 4 oxygen atoms, 1 sulfur atom, and 1 chlorine atom 2 oxygen atoms, 3 hydrogen atoms, and 1 phosphorus atom. 2 oxygen atoms, 3 hydrogen atoms, and 1 phosphorus atom. 2 oxygen atoms, 3 hydrogen atoms, and 1 phosphorus atom. 2 oxygen atoms, 3 hydrogen atoms, and 1 phosphorus atom. 2 oxygen atoms, 3 hydrogen atoms, and 1 phosphorus atom. 2 oxygen atoms, 3 hydrogen atoms, and 1 phosphorus atom. 2 oxygen atoms, 3 hydrogen atoms, and 1 phosphorus atom. 3 iron atom. 4 oxygen atoms, 3 hydrogen atoms, and 1 phosphorus atom. 4 oxygen atoms, 3 hydrogen atoms, and 1 phosphorus atom.		
1 sulfur atom, 4 oxygen atoms and 1 copper atom 1 phosphorus atom, 4 oxygen atoms, 1 hydrogen atom and 2 potassium atoms 1 nitrogen atom, 3 oxygen atoms and 1 chlorine atom 1 nitrogen atom, 2 oxygen atoms and 1 chlorine atom 7 oxygen atoms, 2 potassium atom, and 2 chromium atoms 3 oxygen atoms, 3 hydrogen atoms, and 1 boron atom 4 oxygen atoms, 1 lithium atom, and 1 chlorine atom 4 oxygen atoms, 1 sulfur atom, and 1 cobalt atom 2 oxygen atoms, 3 hydrogen atoms, and 1 phosphorus atom	H Hydrogen Hydro	He Helium
1 phosphorus atom, 4 oxygen atoms, 1 hydrogen atom and 2 potassium atoms 1 nitrogen atom, 3 oxygen atoms and 1 chlorine atom 1 nitrogen atom, 2 oxygen atoms and 1 chlorine atom 7 oxygen atoms, 2 potassium atom, and 2 chromium atoms 3 oxygen atoms, 3 hydrogen atoms, and 1 boron atom 4 oxygen atoms, 1 lithium atom, and 1 chlorine atom 4 oxygen atoms, 1 sulfur atom, and 1 cobalt atom 2 oxygen atoms, 3 hydrogen atoms, and 1 phosphorus atom	1 barium atom, 3 oxygen atoms and 1 carbon atom	
1 phosphorus atom, 4 oxygen atoms, 1 hydrogen atom and 2 potassium atoms 1 nitrogen atom, 3 oxygen atoms and 1 chlorine atom 1 nitrogen atom, 2 oxygen atoms and 1 chlorine atom 7 oxygen atoms, 2 potassium atom, and 2 chromium atoms 3 oxygen atoms, 3 hydrogen atoms, and 1 boron atom 4 oxygen atoms, 1 lithium atom, and 1 chlorine atom 4 oxygen atoms, 1 sulfur atom, and 1 cobalt atom 2 oxygen atoms, 3 hydrogen atoms, and 1 phosphorus atom		
and 2 potassium atoms 1 nitrogen atom, 3 oxygen atoms and 1 chlorine atom 1 nitrogen atom, 2 oxygen atoms and 1 chlorine atom 7 oxygen atoms, 2 potassium atom, and 2 chromium atoms 3 oxygen atoms, 3 hydrogen atoms, and 1 boron atom 4 oxygen atoms, 1 lithium atom, and 1 chlorine atom 4 oxygen atoms, 1 sulfur atom, and 1 cobalt atom 2 oxygen atoms, 3 hydrogen atoms, and 1 phosphorus atom	1 sulfur atom, 4 oxygen atoms and 1 copper atom	
1 nitrogen atom, 3 oxygen atoms and 1 chlorine atom 1 nitrogen atom, 2 oxygen atoms and 1 chlorine atom 7 oxygen atoms, 2 potassium atom, and 2 chromium atoms 3 oxygen atoms, 3 hydrogen atoms, and 1 boron atom 4 oxygen atoms, 1 lithium atom, and 1 chlorine atom 4 oxygen atoms, 1 sulfur atom, and 1 cobalt atom 2 oxygen atoms, 3 hydrogen atoms, and 1 phosphorus atom	1 phosphorus atom, 4 oxygen atoms, 1 hydrogen atom	
1 nitrogen atom, 2 oxygen atoms and 1 chlorine atom 7 oxygen atoms, 2 potassium atom, and 2 chromium atoms 3 oxygen atoms, 3 hydrogen atoms, and 1 boron atom 4 oxygen atoms, 1 lithium atom, and 1 chlorine atom 4 oxygen atoms, 1 sulfur atom, and 1 cobalt atom 2 oxygen atoms, 3 hydrogen atoms, and 1 phosphorus atom	and 2 potassium atoms	
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4 oxygen atoms, 1 lithium atom, and 1 chlorine atom 4 oxygen atoms, 1 sulfur atom, and 1 cobalt atom 2 oxygen atoms, 3 hydrogen atoms, and 1 phosphorus atom		
4 oxygen atoms, 1 sulfur atom, and 1 cobalt atom 2 oxygen atoms, 3 hydrogen atoms, and 1 phosphorus atom	3 oxygen atoms, 3 hydrogen atoms, and 1 boron atom	
2 oxygen atoms, 3 hydrogen atoms, and 1 phosphorus atom	4 oxygen atoms, 1 lithium atom, and 1 chlorine atom	
atom	4 oxygen atoms, 1 sulfur atom, and 1 cobalt atom	
1 iron atom 4 ovugen atoms and 1 selenium		
1 Horratorii, 4 oxygen atoms and 1 selemum	1 iron atom, 4 oxygen atoms and 1 selenium	