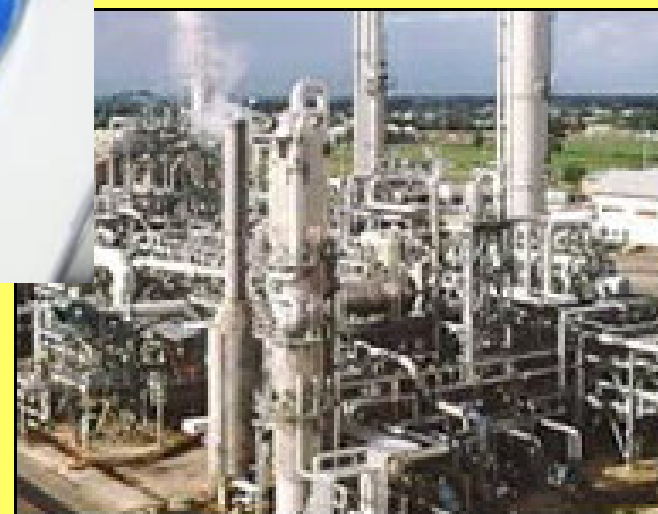


Chapter 9

Chemical Formulas and Compounds



Compound – A Pure Substance made up of two or more elements combined in a definite formula.

The **formula** for a compound shows the proportions of the elements present in the compound.

The formula:



—
**Parts
Carbon**

—
**Parts
Hydrogen**

—
**Parts
Oxygen**

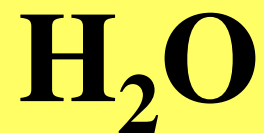
The formula:



12
Parts
Carbon

22
Parts
Hydrogen

11
Parts
Oxygen



Subscript

Gives the
Proportion of
that Element

If a Subscript
is not shown,
it means a

1

Find the **proportion** of each element in the following compound:



Parts

Parts

Parts

Find the **proportion** of each element in the following compound:



2
Parts
Lithium

Parts

Parts

Find the **proportion** of each element in the following compound:



2
Parts
Lithium

2
Parts
Chromium

Parts

Find the **proportion** of each element in the following compound:



2

**Parts
Lithium**

2

**Parts
Chromium**

7

**Parts
Oxygen**

Try one with brackets:



Part

Parts

Parts

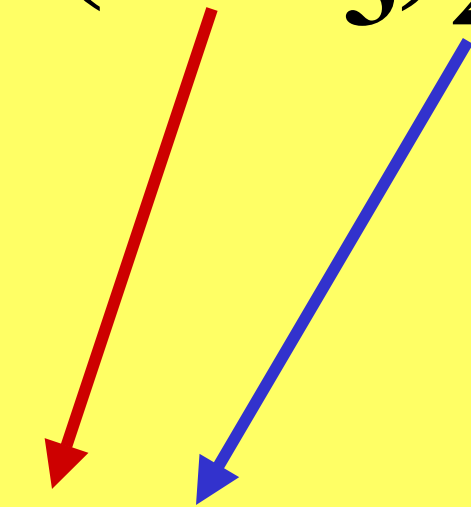
Try one with brackets:



1
Part
Calcium

Parts

Parts



$$1 \times 2 = 2$$

Parts

Nitrogen




$$3 \times 2 = 6$$

Parts

Oxygen

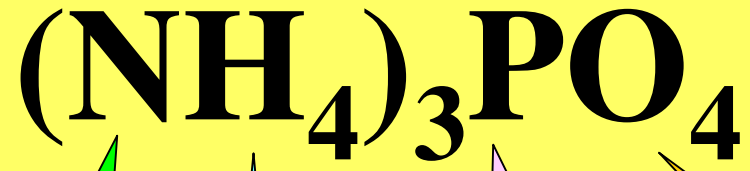


1
Part
Calcium

2
Parts
Nitrogen

6
Parts
Oxygen

Try this one:

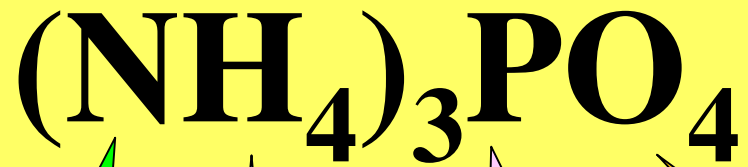


_____ **Parts** _____

_____ **Parts** _____

_____ **Part** _____

_____ **Parts** _____

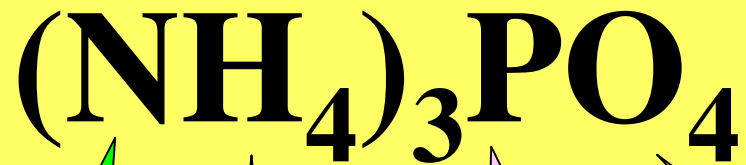


1 x 3 = 3
Parts
Nitrogen

Parts

Part

Parts



$$1 \times 3 = 3$$

Parts

Nitrogen

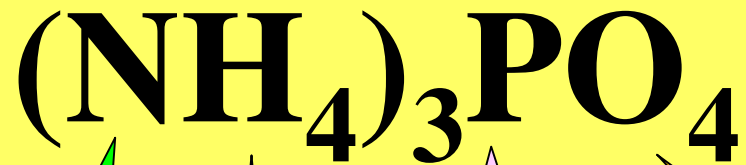
$$4 \times 3 = 12$$

Parts

Hydrogen

Part

Parts



$$1 \times 3 = 3$$

Parts

Nitrogen

1

Part

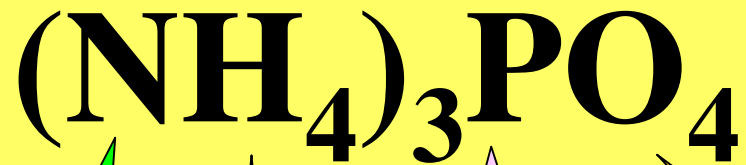
Phosphorus

Parts

$$4 \times 3 = 12$$

Parts

Hydrogen



1 x 3 = 3
Parts
Nitrogen

4 x 3 = 12
Parts
Hydrogen

1
Part
Phosphorus

4
Parts
Oxygen

Do the Instant Practice on Page 186