Name: $\qquad$

## Counting Atoms

The What
The FORMULA for a compound (more than 2 elements) tells you how many atoms are present.
For Example: The formula tells you that there are 2 elements (C \& H)
Carbon $\{C\}=\underset{\text { atoms }}{\text { Hydrogen }\{H\}=12 \text { atoms }}$

The FORMULA is like a recipe for the substance it is creating.


## Directions:

-Complete the chart by:
Naming the ELEMENTS used in the FORMULA
Counting how many atoms for each element is present in the FORMULA.

| Name | What it's Used <br> For | Formula | Elements Names | \# of Atoms |
| :--- | :--- | :--- | :--- | :--- |
| Asprin | Pain Reliever | $\mathrm{C}_{9} \mathrm{H}_{8} \mathrm{O}_{4}$ | $\mathrm{C}=$ | $\mathrm{C}=$ |
|  |  |  | $\mathrm{H}=$ |  |
|  |  | $\mathrm{O}=$ | $\mathrm{H}=$ |  |
| Calcium <br> Carbonate | Limestone | $\mathrm{CaCO}_{3}$ | $\mathrm{Ca}=$ | $0=$ |
|  |  | $\mathrm{C=}$ | $\mathrm{Ca=}$ |  |
|  |  | $0=$ | $\mathrm{C}=$ |  |


| Name | What it's Used <br> For | Formula | Elements Names | \# of Atoms |
| :--- | :--- | :--- | :--- | :--- |
| Water | Hydration | $\mathrm{H}_{2} \mathrm{O}$ | $\mathrm{H}=$ | $\mathrm{H}=$ |
| Silicon <br> Dioxide | Sand | $\mathrm{SiO}_{2}$ | $\mathrm{Si}=$ | $0=$ |
| Iron <br> Oxide | Rust | $\mathrm{Fe}_{2} \mathrm{O}_{3}$ | $\mathrm{Fe}=$ | $\mathrm{Si}=$ |
| Butane | Lighter Fluid | $\mathrm{C}_{4} \mathrm{H}_{10}$ | $\mathrm{C}=$ | $\mathrm{O}=$ |
|  |  | $\mathrm{O}=$ | $\mathrm{Fe}=$ |  |


| Name | What it's Used For | Formula | Elements Names | \# of Atoms |
| :--- | :--- | :--- | :--- | :--- |
| Carbon <br> Dioxide | Gas | $\mathrm{CO}_{2}$ | $C=$ | $C=$ |
| Sucrose | Sugar | $C_{12} \mathrm{H}_{22} \mathrm{O}_{11}$ | $0=$ | $0=$ |
|  |  | $C=$ | $C=$ |  |

