## Atomic Model

1. The Atomic Number of an element shows the number of:
2. The Atomic Mass of an atom shows the number of:
3. The number of Neutrons can be calculated by taking the $\qquad$ and subtracting the $\qquad$ -
4. Protons have a $\qquad$ charge and electrons have a $\qquad$ charge.
5. Atoms are usually neutral (they have an equal number of positive and negative charges). Therefore, the number of
$\qquad$ is equal to the number of $\qquad$ in an atom.

| Element <br> Name | Element Symbol | Atomic <br> Number | Atomic Mass | Number of Electrons | Number of Protons | Number of Neutrons |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Oxygen |  |  |  |  |  | 8 |
|  |  | 6 |  |  | 6 |  |
|  | H |  |  | 1 |  |  |
| Nitrogen |  |  | 14 |  |  |  |
|  | Ca |  |  |  |  | 20 |
|  |  | 15 |  | 15 |  |  |
| Chlorine |  |  |  |  | 17 |  |
|  |  |  | 24 |  |  | 12 |
|  |  | 14 |  |  | 14 |  |
| Potassium |  |  |  | 19 |  |  |
|  | Sr |  |  | 38 |  |  |
|  |  | 87 |  |  | 87 |  |
| Xenon |  |  |  | 54 |  |  |

Find answers with the Periodic Table: either your paper one, on the next page or here: http://www.ptable.com/

| 1 |  | Periodic Table of the Elements |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 18 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\underset{\substack{\text { Hidroee } \\ 10: 0 \mathrm{e}}}{\mathbf{H}}$ | 2 |  |  |  |  |  |  |  |  |  |  | 13 | 14 | 15 | 16 | 17 | $\underbrace{\mathrm{He}}_{\substack{2 \\ \hline \text { Helum } \\ 4003}}$ |
|  |  |  |  |  |  |  |  |  |  |  |  | ${ }^{5}$ |  |  | $\int_{\substack{8 \\ 0 \\ 0 \\ 15 n y e n}}$ |  | ${ }^{10} \mathrm{Ne}$ |
| $\begin{aligned} & \hline 11 \\ & \mathbf{N a} \\ & \begin{array}{c} \text { scalam } \\ 2990 \end{array} \end{aligned}$ | $12 \mathrm{Mg}$ | 3 | 4 | 5 | , | 7 | 8 | 9 | 10 | 11 | 12 |  | $\sum_{\substack{14 \\ \text { Siceos } \\ 200 e s}}$ | $\mathbf{P}_{15}^{15}$ | $\begin{gathered} 16 \\ \substack{10 \\ \text { sutur } \\ 32066} \\ \hline \end{gathered}$ |  |  |
| $\begin{gathered} 19 \\ \text { Rousum } \\ 39908 \end{gathered}$ |  |  |  |  |  |  |  | $\underbrace{27} \begin{aligned} & \text { Co } \\ & \text { cober } \\ & \text { cemj }\end{aligned}$ |  |  |  |  |  |  | $\begin{gathered} 34 \\ \text { Sele } \\ 7 \end{gathered}$ |  | $\underbrace{}_{\substack{36 \\ \mathbf{K r g r t e n} \\ 8480 \\ \hline \\ \hline}}$ |
| $\begin{gathered} 37 \\ \mathbf{R b} \\ \substack{\text { Rodum } \\ 88448 \\ \hline 8} \end{gathered}$ |  |  |  |  | $42$ |  |  | ${ }^{\text {a }}$ | $\xrightarrow{46}$ |  |  |  |  |  | $\begin{aligned} & 52 \\ & \mathrm{Te} \\ & \text { Thinum } \\ & 1027 . \end{aligned}$ | $\left.\right\|_{\|c\|} ^{53}$ | $\xrightarrow{\substack{\mathbf{X 4} \mathbf{X e} \\ \text { xen } \\ 13129}}$ |
|  |  | Lemit |  |  | $74$ |  | Os <br> Oimum 1023 |  | $\begin{aligned} & 78 \\ & \mathrm{P}^{\text {Patave }} \\ & 10508 \end{aligned}$ |  | $\mathrm{Hg}$ $2005$ | $81$ | $\underbrace{}_{\substack{\text { Pad } \\ \text { Lend } \\ 2072}}$ | $\mathrm{Bi}_{8}^{83} \mathbf{B i}$ |  |  |  |
|  | 88 <br> $\mathbf{R a}$ <br> Ratam <br> 22605 | 89-103 | $\mathrm{Cff}_{\mathrm{Rf}}^{104}$ | $\begin{aligned} & 105 \\ & \text { Db } \\ & \text { Didnum } \\ & \text { never } \end{aligned}$ |  |  |  | $\mathrm{Ma}_{\mathrm{Mt}}^{109}$ |  |  |  | Uut |  |  | $\mathrm{Lv}$ | Uus | Uno |


| La | ${ }^{58} \mathrm{Ce}$ | ${ }^{59} \mathrm{Pr}$ | ${ }^{60} \mathrm{Nd}$ | Pm | Sm | Eu | ${ }^{64} \text { Gd }$ | Тb | $\int_{0}^{66} \text { Dy }$ | $\sqrt{67} \mathrm{Ho}$ | Er | Tm | ${ }^{70} \mathbf{Y b}$ | Lu |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13906 | 42.15 | 14.908 | 1424 | 14.93 | 15036 | ${ }_{51,966}$ | 15725 | 15895 | 1655 | 164930 | 1672 | 68934 | 704 | 174697 |
|  | ${ }^{90}$ Th | Pa | ${ }^{92}$ |  |  | ${ }^{95}$ | Cm | Bk | ${ }^{98}$ | Es | $\stackrel{100}{100}$ | $\begin{aligned} & 101 \\ & M d \end{aligned}$ | No | ${ }^{103} \mathbf{L r}$ |
| $277 \times 2$ |  | Prazernu | 2ece | N | ${ }^{4}$ | 20\% |  |  |  |  |  | 2sal |  |  |

