

Atomic Math Challenge

KEY

Name _____ Block _____

| |
|-----------|
| 3 |
| Li |
| Lithium |
| 6.941 |

← protons

← symbol

← name

← mass

Atomic number equals

The number of

protons or electrons

Atomic mass equals

The number of

protons + neutrons

| | | | | | | | | | | | | | | | | | | | |
|--|----------|----------|--------------|--------------|--|----|----------|---------------|-------|---|----------|-----------|----------------|-------------|--|----|----------|------------------|--------|
| <table style="width: 100%; text-align: center;"> <tr><td><u>5</u></td></tr> <tr><td>B</td></tr> <tr><td><u>Boron</u></td></tr> <tr><td><u>10.81</u></td></tr> </table> <p>Atomic # = <u>5</u> Mass # = <u>10.81</u> # Protons = <u>5</u> # Neutrons = <u>6</u> # electrons = <u>5</u></p> | <u>5</u> | B | <u>Boron</u> | <u>10.81</u> | <table style="width: 100%; text-align: center;"> <tr><td>16</td></tr> <tr><td>S</td></tr> <tr><td><u>Sulfur</u></td></tr> <tr><td>32.06</td></tr> </table> <p>Atomic # = <u>16</u> Mass # = <u>32.06</u> # Protons = <u>16</u> # Neutrons = <u>16</u> # electrons = <u>16</u></p> | 16 | S | <u>Sulfur</u> | 32.06 | <table style="width: 100%; text-align: center;"> <tr><td><u>3</u></td></tr> <tr><td>Li</td></tr> <tr><td><u>Lithium</u></td></tr> <tr><td><u>6.94</u></td></tr> </table> <p>Atomic # = <u>3</u> Mass # = <u>6.94</u> # Protons = <u>3</u> # Neutrons = <u>4</u> # electrons = <u>3</u></p> | <u>3</u> | Li | <u>Lithium</u> | <u>6.94</u> | <table style="width: 100%; text-align: center;"> <tr><td>19</td></tr> <tr><td>K</td></tr> <tr><td><u>Potassium</u></td></tr> <tr><td>39.098</td></tr> </table> <p>Atomic # = <u>3</u> Mass # = <u>39.098</u> # Protons = <u>19</u> # Neutrons = <u>20</u> # electrons = <u>19</u></p> | 19 | K | <u>Potassium</u> | 39.098 |
| <u>5</u> | | | | | | | | | | | | | | | | | | | |
| B | | | | | | | | | | | | | | | | | | | |
| <u>Boron</u> | | | | | | | | | | | | | | | | | | | |
| <u>10.81</u> | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | |
| S | | | | | | | | | | | | | | | | | | | |
| <u>Sulfur</u> | | | | | | | | | | | | | | | | | | | |
| 32.06 | | | | | | | | | | | | | | | | | | | |
| <u>3</u> | | | | | | | | | | | | | | | | | | | |
| Li | | | | | | | | | | | | | | | | | | | |
| <u>Lithium</u> | | | | | | | | | | | | | | | | | | | |
| <u>6.94</u> | | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | | |
| K | | | | | | | | | | | | | | | | | | | |
| <u>Potassium</u> | | | | | | | | | | | | | | | | | | | |
| 39.098 | | | | | | | | | | | | | | | | | | | |

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|--|----|-----------|---------------|--------------|--|----------|----------|-----------------|------|---|----|-----------|----------------|--------------|---|-----------|-----------|-----------------|--------------|
| <table style="width: 100%; text-align: center;"> <tr><td>11</td></tr> <tr><td>Na</td></tr> <tr><td><u>Sodium</u></td></tr> <tr><td><u>22.99</u></td></tr> </table> <p>Atomic # = <u>11</u> Mass # = <u>22.99</u> # Protons = <u>11</u> # Neutrons = <u>12</u> # electrons = <u>11</u></p> | 11 | Na | <u>Sodium</u> | <u>22.99</u> | <table style="width: 100%; text-align: center;"> <tr><td><u>1</u></td></tr> <tr><td>H</td></tr> <tr><td><u>Hydrogen</u></td></tr> <tr><td>1.01</td></tr> </table> <p>Atomic # = <u>1</u> Mass # = <u>1.01</u> # Protons = <u>1</u> # Neutrons = <u>0</u> # electrons = <u>1</u></p> | <u>1</u> | H | <u>Hydrogen</u> | 1.01 | <table style="width: 100%; text-align: center;"> <tr><td>14</td></tr> <tr><td>Si</td></tr> <tr><td><u>Silicon</u></td></tr> <tr><td><u>28.09</u></td></tr> </table> <p>Atomic # = <u>14</u> Mass # = <u>28.09</u> # Protons = <u>14</u> # Neutrons = <u>14</u> # electrons = <u>14</u></p> | 14 | Si | <u>Silicon</u> | <u>28.09</u> | <table style="width: 100%; text-align: center;"> <tr><td><u>17</u></td></tr> <tr><td>Cl</td></tr> <tr><td><u>Chlorine</u></td></tr> <tr><td><u>35.45</u></td></tr> </table> <p>Atomic # = <u>17</u> Mass # = <u>35.45</u> # Protons = <u>17</u> # Neutrons = <u>18</u> # electrons = <u>17</u></p> | <u>17</u> | Cl | <u>Chlorine</u> | <u>35.45</u> |
| 11 | | | | | | | | | | | | | | | | | | | |
| Na | | | | | | | | | | | | | | | | | | | |
| <u>Sodium</u> | | | | | | | | | | | | | | | | | | | |
| <u>22.99</u> | | | | | | | | | | | | | | | | | | | |
| <u>1</u> | | | | | | | | | | | | | | | | | | | |
| H | | | | | | | | | | | | | | | | | | | |
| <u>Hydrogen</u> | | | | | | | | | | | | | | | | | | | |
| 1.01 | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | |
| Si | | | | | | | | | | | | | | | | | | | |
| <u>Silicon</u> | | | | | | | | | | | | | | | | | | | |
| <u>28.09</u> | | | | | | | | | | | | | | | | | | | |
| <u>17</u> | | | | | | | | | | | | | | | | | | | |
| Cl | | | | | | | | | | | | | | | | | | | |
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| <u>35.45</u> | | | | | | | | | | | | | | | | | | | |

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| <p style="text-align: center;"><u>27</u></p> <p style="text-align: center;">Co</p> <p style="text-align: center;"><u>Cobalt</u></p> <p style="text-align: center;">58.93</p> <p>Atomic # = <u>27</u></p> <p>Mass # = <u>58.93</u></p> <p># Protons = <u>27</u></p> <p># Neutrons = <u>32</u></p> <p># electrons = <u>27</u></p> | <p style="text-align: center;"><u>39</u></p> <p style="text-align: center;">Y</p> <p style="text-align: center;"><u>Yttrium</u></p> <p style="text-align: center;">88.91</p> <p>Atomic # = <u>39</u></p> <p>Mass # = <u>88.91</u></p> <p># Protons = <u>39</u></p> <p># Neutrons = <u>50</u></p> <p># electrons = <u>39</u></p> | <p style="text-align: center;"><u>9</u></p> <p style="text-align: center;">F</p> <p style="text-align: center;"><u>Flourine</u></p> <p style="text-align: center;">19.00</p> <p>Atomic # = <u>9</u></p> <p>Mass # = <u>19.00</u></p> <p># Protons = <u>9</u></p> <p># Neutrons = <u>10</u></p> <p># electrons = <u>9</u></p> | <p style="text-align: center;"><u>56</u></p> <p style="text-align: center;">Ba</p> <p style="text-align: center;"><u>Barium</u></p> <p style="text-align: center;">137.33</p> <p>Atomic # = <u>56</u></p> <p>Mass # = <u>137.33</u></p> <p># Protons = <u>56</u></p> <p># Neutrons <u>81</u></p> <p># electrons = <u>56</u></p> |
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|--|---|---|--|
| <p style="text-align: center;">15</p> <p style="text-align: center;">P</p> <p style="text-align: center;"><u>Phosphorous</u></p> <p style="text-align: center;"><u>30.97</u></p> <p>Atomic # = <u>15</u></p> <p>Mass # = <u>30.97</u></p> <p># Protons = <u>15</u></p> <p># Neutrons = <u>16</u></p> <p># electrons = <u>15</u></p> | <p style="text-align: center;"><u>79</u></p> <p style="text-align: center;">Au</p> <p style="text-align: center;"><u>Gold</u></p> <p style="text-align: center;">196.97</p> <p>Atomic # = <u>79</u></p> <p>Mass # = <u>196.97</u></p> <p># Protons = <u>79</u></p> <p># Neutrons = <u>118</u></p> <p># electrons = <u>79</u></p> | <p style="text-align: center;"><u>92</u></p> <p style="text-align: center;">U</p> <p style="text-align: center;"><u>Uranium</u></p> <p style="text-align: center;">238.05</p> <p>Atomic # = <u>92</u></p> <p>Mass # = <u>238.05</u></p> <p># Protons = <u>92</u></p> <p># Neutrons = <u>146</u></p> <p># electrons = <u>92</u></p> | <p style="text-align: center;">86</p> <p style="text-align: center;">Ru</p> <p style="text-align: center;"><u>Radon</u></p> <p style="text-align: center;"><u>222</u></p> <p>Atomic # = <u>86</u></p> <p>Mass # = <u>222</u></p> <p># Protons = <u>86</u></p> <p># Neutrons = <u>136</u></p> <p># electrons = <u>86</u></p> |
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|---|---|---|--|
| <p style="text-align: center;"><u>74</u></p> <p style="text-align: center;">W</p> <p style="text-align: center;"><u>Tungsten</u></p> <p style="text-align: center;"><u>183.84</u></p> <p>Atomic # = <u>74</u></p> <p>Mass # = <u>183.84</u></p> <p># Protons = <u>74</u></p> <p># Neutrons = <u>110</u></p> <p># electrons = <u>74</u></p> | <p style="text-align: center;"><u>50</u></p> <p style="text-align: center;">Sn</p> <p style="text-align: center;"><u>Tin</u></p> <p style="text-align: center;">118.71</p> <p>Atomic # = <u>50</u></p> <p>Mass # = <u>118.71</u></p> <p># Protons = <u>50</u></p> <p># Neutrons = <u>69</u></p> <p># electrons = <u>50</u></p> | <p style="text-align: center;"><u>80</u></p> <p style="text-align: center;">Hg</p> <p style="text-align: center;"><u>Mercury</u></p> <p style="text-align: center;"><u>200.59</u></p> <p>Atomic # = <u>80</u></p> <p>Mass # = <u>200.59</u></p> <p># Protons = <u>80</u></p> <p># Neutrons = <u>121</u></p> <p># electrons = <u>80</u></p> | <p style="text-align: center;"><u>53</u></p> <p style="text-align: center;">I</p> <p style="text-align: center;"><u>Iodine</u></p> <p style="text-align: center;"><u>126.70</u></p> <p>Atomic # = <u>53</u></p> <p>Mass # = <u>126.90</u></p> <p># Protons = <u>53</u></p> <p># Neutrons = <u>74</u></p> <p># electrons = <u>53</u></p> |
|---|---|---|--|