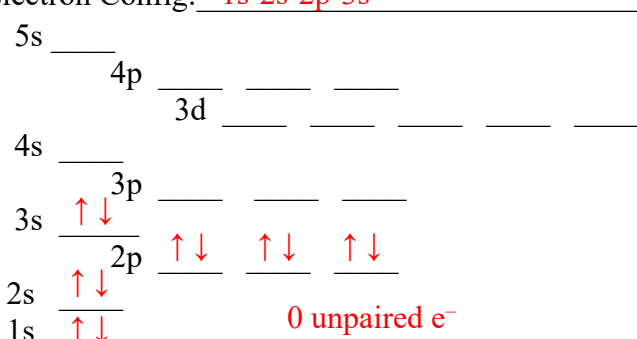
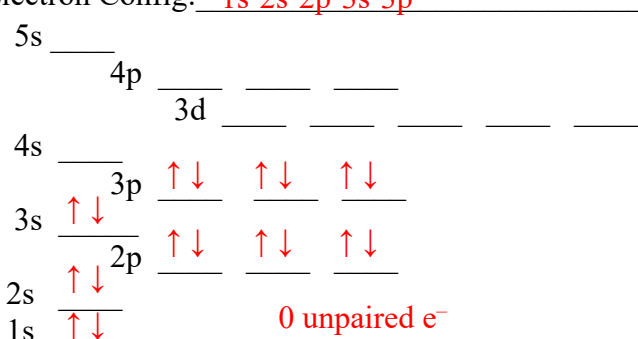
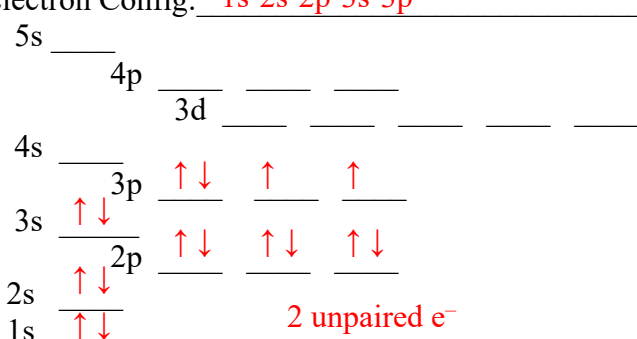
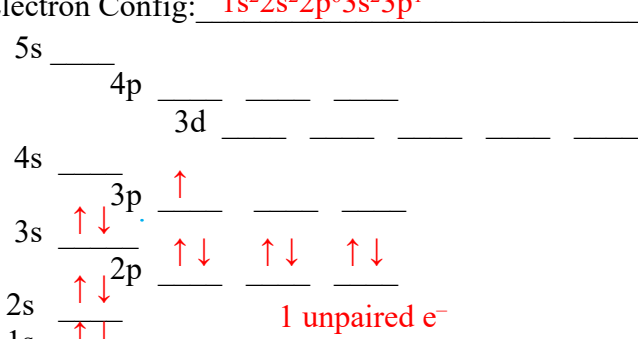
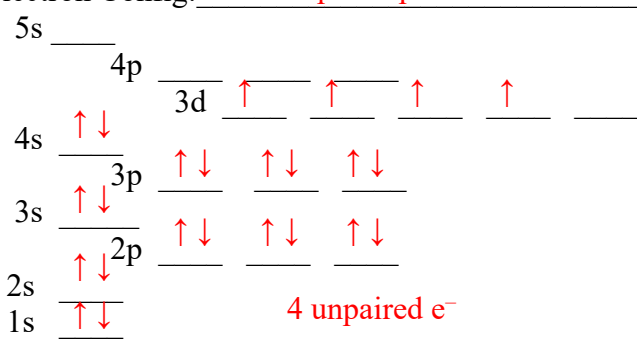
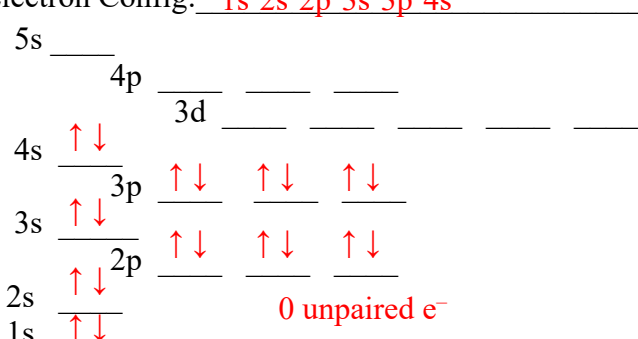
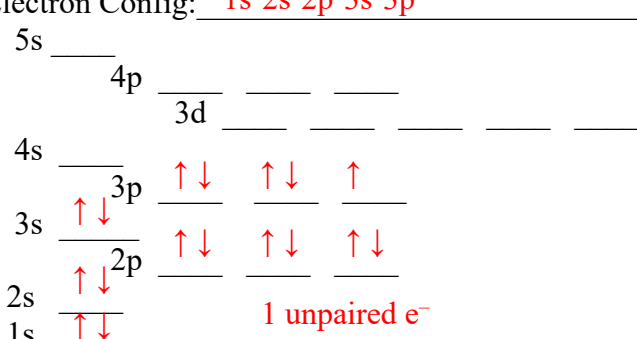
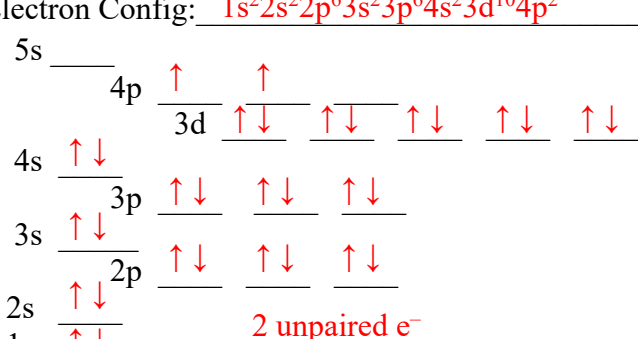


For all of the elements below, determine the arrow diagram then write the electron configuration. Indicate the number of *unpaired* electrons in the element.

<p>1) Element: Mg # of electrons= <u>12</u> Electron Config: <u>$1s^2 2s^2 2p^6 3s^2$</u></p>  <p style="text-align: right;">0 unpaired e⁻</p>	<p>2) Element: Ar # of electrons= <u>18</u> Electron Config: <u>$1s^2 2s^2 2p^6 3s^2 3p^6$</u></p>  <p style="text-align: right;">0 unpaired e⁻</p>
<p>3) Element: S # of electrons= <u>16</u> Electron Config: <u>$1s^2 2s^2 2p^6 3s^2 3p^4$</u></p>  <p style="text-align: right;">2 unpaired e⁻</p>	<p>4) Element: Al # of electrons= <u>13</u> Electron Config: <u>$1s^2 2s^2 2p^6 3s^2 3p^1$</u></p>  <p style="text-align: right;">1 unpaired e⁻</p>
<p>5) Element: Cr # of electrons= <u>24</u> Electron Config: <u>$1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^4$</u></p>  <p style="text-align: right;">4 unpaired e⁻</p>	<p>6) Element: Ca # of electrons= <u>20</u> Electron Config: <u>$1s^2 2s^2 2p^6 3s^2 3p^6 4s^2$</u></p>  <p style="text-align: right;">0 unpaired e⁻</p>
<p>7) Element: Cl # of electrons= <u>17</u> Electron Config: <u>$1s^2 2s^2 2p^6 3s^2 3p^5$</u></p>  <p style="text-align: right;">1 unpaired e⁻</p>	<p>8) Element: Ge # of electrons= <u>32</u> Electron Config: <u>$1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^2$</u></p>  <p style="text-align: right;">2 unpaired e⁻</p>