

*dots, brackets & charges*

1) Using the Periodic Table, draw electron-dot structures for atoms of the following elements:

- a) lithium      b) aluminum      c) phosphorus      d) sulfur      e) iodine

2) Using the Periodic Table, draw the electron-dot structures for the following ions:

- a) fluoride ion,  $F^-$       b) calcium ion,  $Ca^{+2}$       c) oxide ion,  $O^{-2}$       d) potassium ion,  $K^{+1}$

3) Use electron dot diagrams to represent the reaction of barium with sulfur to form barium ions,  $Ba^{+2}$ , and sulfide ions,  $S^{-2}$ . Then, draw the  $e^-$  dot structure of barium sulfide.

4) Use electron dot diagrams to represent the reaction of sodium with oxygen to form sodium ions,  $Na^{+1}$ , and oxide ions,  $O^{-2}$ . Then, draw the  $e^-$  dot structure of sodium oxide.