

**LEWIS STRUCTURES & MOLECULAR SHAPES****Exit Ticket 6**

1. Determine the total number of valence electrons and write Lewis structures for each molecule or ion shown below:

a)  $\text{NBr}_3$                       total # of electrons: \_\_\_\_\_

b)  $\text{SCl}_2$                       total # of electrons: \_\_\_\_\_

c)  $\text{BH}_4^-$                       total # of electrons

2. Predict the shape of each molecule or ion in problem 1.

a) \_\_\_\_\_

b) \_\_\_\_\_

c) \_\_\_\_\_

3. Draw Lewis structures for each of the following:

a) HCCH

b)  $\text{NO}_3^-$

4. Predict whether the bond between each of the following pairs of atoms is nonpolar covalent, polar covalent or ionic.

a) Si-Br \_\_\_\_\_

b) I-I \_\_\_\_\_

c) Li-O \_\_\_\_\_

5. For the bond between each of the following pairs of atoms, indicate the positive end with  $\delta^+$  and the negative end with  $\delta^-$  and draw an arrow to indicate the direction of polarity.

a) F and N

b) Br and P

c) N and H