

Making Imaginary Compounds

Name _____

Date _____

Period _____

• **Problem:** Some elements can combine with other elements in specific amounts to make new compounds. Some elements just can't combine. Your job is to combine to the various nuts and bolts to represent your compounds and express them with symbols.

• **Symbols:**

Short bolt = Sb



Long bolt = Lb



Hexagon Nut = Hn



Square Nut = Sn



Small washer = Sw



Medium Washer



Large washer = Lw



Wing Nut = Wn



• **Procedure:** Sort the nuts and bolts into separate piles. Each nut, bolt, washer represent one atom of that kind of element. What kind of combinations can you put together using the different nuts, bolts, and washers. Example: the short bolt (Sb), two hex nuts (Hn), and one Large washer (Lw) would make the compound $SbHn_2Lw$. Put together as many different compounds as you can think of using the Small bolt (Sb) and the other pieces. Record your compounds in the spaces below. Then do the same thing for the Long bolt.

Sb Compounds

(Sb or Lb symbol is always first)

Lb Compounds

How many nuts can fit on one small bolt? _____ Write the formula _____

How many nuts can fit on one long bolt? _____ Write the formula _____

• Make and draw the following compounds below

$SbLbHn_2Lw_2$

$Lb_2HnSw_2Lw_2$

$LbSbHn_2WnSwLw_2$

• On the back side of this paper, draw and write the formulas of **7** different compounds using only two short bolts and four hex nuts.