Flow Chart for Naming Simple Inorganic Compounds

The flowchart is adapted from p. 131-132 of the February 1983 issue of the Journal of Chemical Education.

1. Does the formula begin with H?
   - No
   - Yes
     2. Are there two atoms, both the same?
        - Yes
        - No
          3. It is an acid.
             3.1. Does the acid contain a polyatomic ion? (More than two elements.)
                - Yes
                - No
                  4. It is the diatomic gas hydrogen.
                  5. Does the formula contain a polyatomic ion? (More than two elements.)
                     - Yes
                     - No
                       6. Name the first element, then the polyatomic ion. (If two elements are present, name both, then the polyatomic ion.)
                           6.1. Are both elements nonmetals?
                                - No
                                - Yes
                                  7. Name the first element, then the second element with -ide ending.
                                    7.1. Are both elements the same?
                                         - No
                                         - Yes
                                           8. Name the first element using the proper prefix (di, tri, etc.), but never mono. Name the second element with the proper prefix (including mono) and the -ide ending.
                                              9. It is a diatomic element. The compound has the same name as the element.