

This quiz is take-home and open book, and it is intended that all members of the group contribute to completing it. It is a violation of the Academic Honor Code to sign a quiz that you did not work on. **The quiz is due at the end of class on Thursday, October 26.**

List names in alphabetical order, and print them clearly!
Put names on all pages, and staple pages together

Points

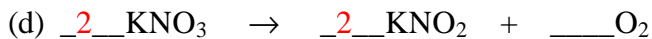
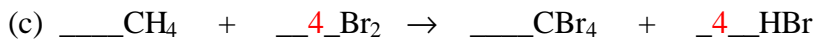
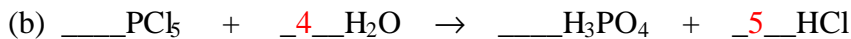
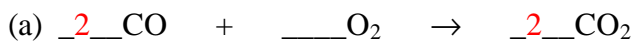
- (3) 1. Circle the following compounds in which hydrogen bonding would play a role in the intermolecular forces: (0.5 pts each, correctly circled or not)



- (2) 2. List four unusual properties of water. (0.5 pts each, any four)

high melting point
 high boiling point
 high specific heat
 high heat of fusion
 high heat of vaporization
 ice less dense than liquid water

- (5) 3. Balance the following chemical equations. (1 pt each)



List names in alphabetical order. **Be sure to staple pages together!**

(5) 4. What is the formula weight (in amu) of the following substances?: (okay to round answer to one decimal point).

(a) KBr

$$39.1 + 79.9 = 119.0$$

(b) Na_2HPO_4

$$2(23.0) + 1.0 + 31.0 + 4(16.0) = 142.0$$

(c) NCl_3

$$14.0 + 3(35.5) = 120.5$$

(d) ICl_5

$$126.9 + 5(35.5) = 304.4$$

(e) $\text{C}_{12}\text{H}_{22}\text{O}_{11}$

$$12(12.0) + 22(1.0) + 11(16.0) = 342.0$$