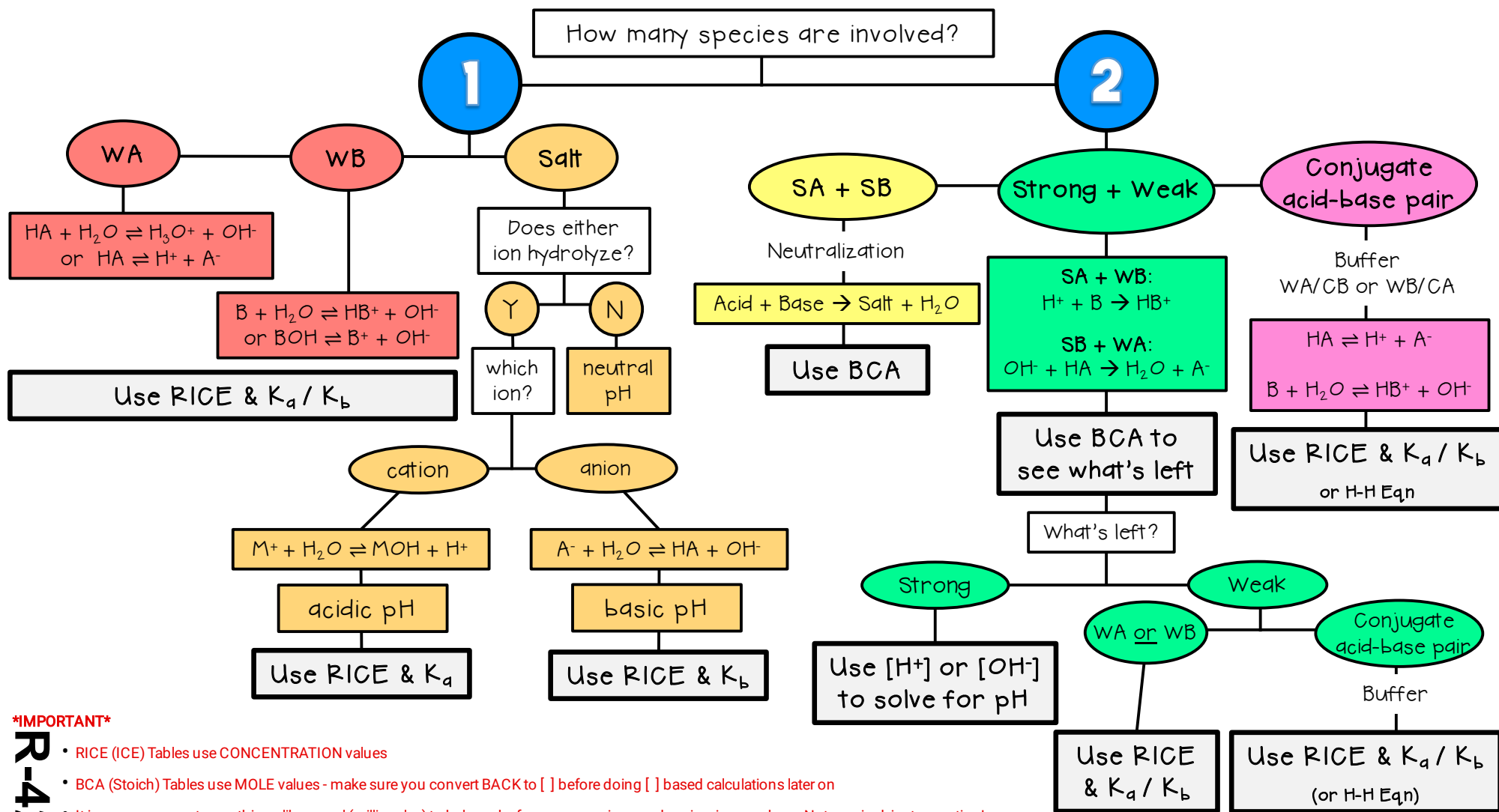


ACID-BASE EQUILIBRIA

Identifying the type of problem & how to solve it



IMPORTANT

R-42

- RICE (ICE) Tables use CONCENTRATION values
- BCA (Stoich) Tables use MOLE values - make sure you convert BACK to [] before doing [] based calculations later on
- It is very common to see things like mmol (milli moles) to help make fewer conversions and easier size numbers. Not required, just an option!

SA = strong acid WA = weak acid CA = conjugate acid RICE = reaction / initial / change / equilibrium table
 SB = strong base WB = weak base CB = conjugate base BCA = before / change / after (stoichiometry) table

$$[H^+] = K_a \frac{\text{acid}}{\text{base}} \quad pH = pK_a + \log \frac{[A^-]}{[HA]}$$