

N38 - Salts

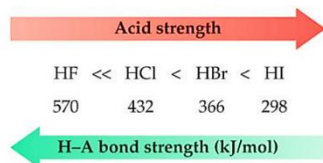
	Turns into a...	Hydrolyzes?
Strong Acid	Weak conjugate base	No
Weak Acid	Strong conjugate base	Yes
Strong Base	Weak conjugate acid	No
Weak Base	Strong conjugate acid	Yes

	Turns into a...	Hydrolyzes?	Ion makes sol'n
Strong Acid	Weak conjugate base	No	Neutral
Weak Acid	Strong conjugate base	Yes	Basic
Strong Base	Weak conjugate acid	No	Neutral
Weak Base	Strong conjugate acid	Yes	Acidic

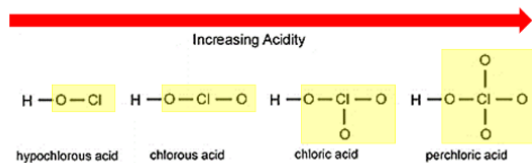
	Makes the solution...
Acidic + Neutral	Acidic
Basic + Neutral	Basic
Neutral + Neutral	Neutral
Acidic + Basic	Compare K_a and K_b to determine which "wins"

$K_{a(ion)} > K_{b(ion)}$	Acidic
$K_{a(ion)} < K_{b(ion)}$	Basic
$K_{a(ion)} = K_{b(ion)}$	Neutral

Strength of Binary Acids



Strength of Oxyacids (and other similar)



High electronegativity of the side group pulls electron density AWAY from the bond involving Hydrogen. Bond is therefore weakened so it breaks more easily, therefore more acidic.

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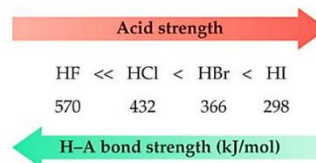
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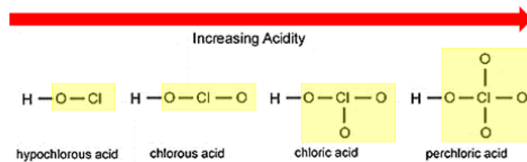
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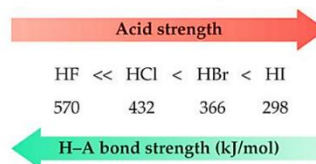
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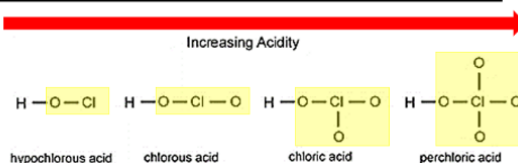
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Acidic
Basic
Neutral
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$K_{a(ion)} < K_{b(ion)}$
$K_{a(ion)} = K_{b(ion)}$