

Quiz 10.1 – Acids and Bases

Name: _____

Question 1

List the six strong acids (some textbooks include a seventh, include it if you wish)

Question 2

Complete the following table of acid/base conjugate pairs

Conjugate Acid	Conjugate Base	Conjugate Acid	Conjugate Base
_____	NO_3^-	HClO_2	_____
HCH_3CO_2	_____	_____	SO_4^{2-}
H_2PO_4^-	_____	_____	F^-
_____	H_2PO_4^-	$\text{H}_2\text{C}_2\text{O}_4$	_____

Question 3

HCN has $K_a = 4.9 \times 10^{-10}$ and HCHO_2 has $K_a = 1.8 \times 10^{-4}$.
Between CN^- and CHO_2^- , which is the stronger base.

Question 4Give the pH for a solution with $[\text{H}_3\text{O}^+] = 3.45 \times 10^{-12} M$ **Question 5**Find $[\text{OH}^-]$ for a solution with $pH = 4.65$

Your World

By Georgia Douglas Johnson

Your world is as big as you make it.
I know, for I used to abide
In the narrowest nest in a corner,
My wings pressing close to my side.

But I sighted the distant horizon
Where the skyline encircled the sea
And I throbbed with a burning desire
To travel this immensity.

I battered the cordons around me
And cradled my wings on the breeze,
Then soared to the uttermost reaches
With rapture, with power, with ease!