

# Acids and Bases

Weak acids = more stable  
Strong acids = less stable

Weak bases = more stable  
Strong bases = less stable

Weak bases (stable) go with Strong acids (less stable)

Strong bases (less stable) go with Weak acids (stable)

The more electronegative an atom,  
the more stable it is to hold a  
negative charge ( $O^-$  vs  $N^-$  vs  $C^-$ )

↑  
more  
stable

↑  
less  
stable

Your Answer

Correct Answer

✓ Correct. Nitrogen is more electronegative than carbon and can better stabilize the negative charge that will be generated upon deprotonation. Therefore, a proton connected to a nitrogen atom is expected to be more acidic than a proton connected to a carbon atom.



- The blue proton is more acidic because its conjugate base is less stable, with a negative charge on the more electronegative nitrogen atom. strong base
- The blue proton is more acidic because its conjugate base is more stable, with a negative charge on the more electronegative nitrogen atom. less stable
- The red proton is more acidic because its conjugate base is more stable, with a negative charge on the less electronegative carbon atom.
- The red proton is more acidic because its conjugate base is less stable, with a negative charge on the less electronegative carbon atom.

Practice question from  
Wiley that explains this  
concept well