

Quiz 10.2 – Resonance and Formal Charges

Name: _____

Problem 1 (2 points)

The strength of formic acid CHOOH comes from the stability of the formate ion CHO_2^- , which exhibits *resonance* in its double-bond.

Draw all the appropriate resonance structures, as well as the hybrid structure for the formate ion

Question 2 (2 points)

Thiocyanate ion, SCN^- , has C as the central atom. Give three guesses for the Lewis structure for SCN^- , and list the formal charges for all three atoms in the structures.

Question 3 (1 point)

Which of the three structures above is the *best*, and why

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!