

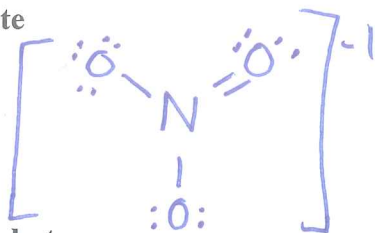
60

Name: CALVIN
Date:
Hour:

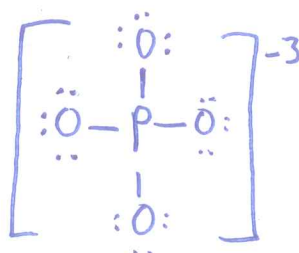
Chemistry ~ Ch. 7/8 Quiz ~ Lewis Dot diagrams

1) Draw Lewis Dot diagrams for the following:

a) Nitrate



b) Phosphate



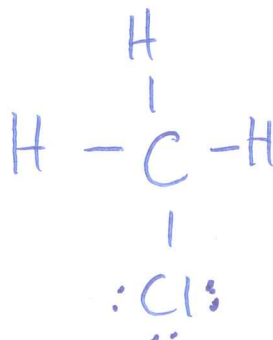
c) Nitrogen gas



d) CO₂



e) CH₃Cl



5 pts each

Geometry: trig. planar
Polar: Non
Hybridization: sp²
Sigma/pi: 3 sig, 1 pi

Geometry: tetrahedral
Polar: Non
Hybridization: sp³
Sigma/pi: 4 sig, 0 pi

Geometry: linear
Polar: Non
Sigma/pi: 1 sig, 2 pi

Geometry: linear
Polar: Non
Hybridization: sp
Sigma/pi: 2 sig, 2 pi

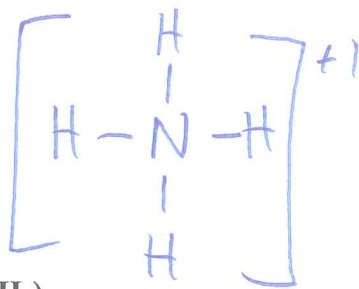
Geometry: tetrahedral
Polar: yes (polar)
Hybridization: sp³
Sigma/pi: 4 sig, 0 pi

f) H₂O



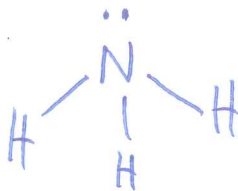
Geometry: bent
 Polar: yes (polar)
 Hybridization: sp
 Sigma/pi: 2sig, 0pi

g) Ammonium



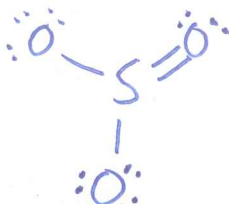
Geometry: tetrahedral
 Polar: Non
 Hybridization: sp³
 Sigma/pi: 4sig, 0pi

h) Ammonia (NH₃)



Geometry: trig. pyramidal
 Polar: yes (polar)
 Hybridization: sp³
 Sigma/pi: 3sig, 0pi

k) SO₃



Geometry: trig. planar
 Polar: Non
 Hybridization: sp²
 Sigma/pi: 3sig, 1pi

5pts each

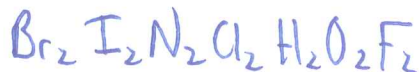
2pts

l) What does VSEPR stand for?

Valence Shell Electron Pair Repulsion

2) List the SEVEN diatomic molecules:

7pts



3) What is an ionic compound? Give one example...

2pts

Reax. * one metal + one nonmetal

4) What is a covalent compound? Give one example...

2pts

Reax. * two nonmetals

Go Vikings!