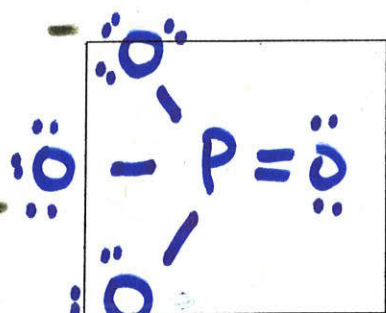


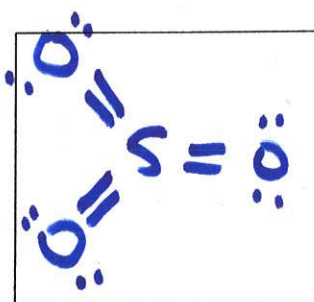
Your name: ANSWERS /28

1a) Draw the most stable Lewis structures for the species below using the Periodic Table on the reverse. (4 pts each/16 pts total)

1b) Below each of your Lewis structures, provide the VSEPR-predicted shape of the molecule you drew. (2 pts each/8 pts total)

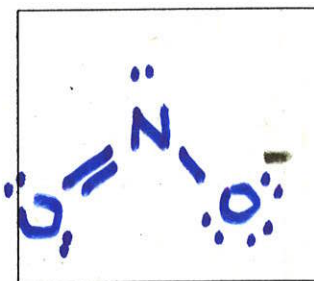


tetrahedron

VSEPR shape
(pyramid)

trigonal plane

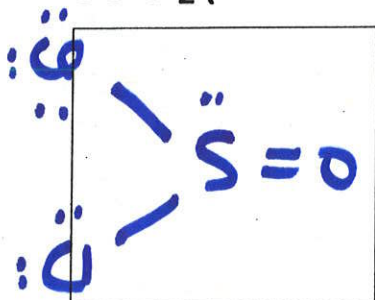
VSEPR shape



bent

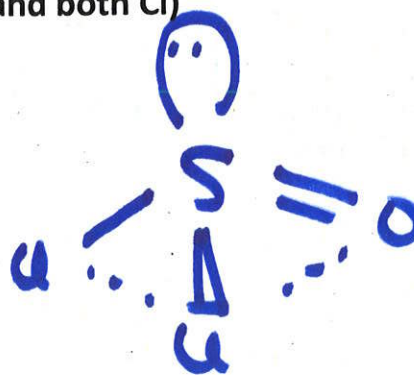
VSEPR shape

SOCl_2 (assume S is centrally bonded to O and both Cl)



trigonal pyramid

VSEPR shape



2. What are the shapes of the molecules below? (1 pt each/4 pts total)

Molecule	VSEPR-predicted shape
CH_4	tetrahedral
SF_6	octahedral
PF_5	trigonal bipyram. d
NO_3^-	trigonal plane

