**Quiz 8 Chemical Principles I Chem 1984 Fall 2013**

 **Your name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_/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)**

**PO4-3 SO3 NO2-1**

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 **VSEPR shape VSEPR shape VSEPR shape**

**SOCl2 ( assume S is centrally bonded to O and both Cl)**

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 **VSEPR shape**

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

**Molecule VSEPR-predicted shape**

**CH4**

**SF6**

**PF5**

**NO3-**