Exercise 6.5a
VSEPR Theory

Name: _____

Date: _____ Per: _____

DIRECTIONS: Answer the following in the space provided:

1. Describe the principal behind VSEPR Theory: _____

2. Define the following:
   a. Electron domain _____
   b. Bonded pair _____
   c. Unshared pair _____

3. Complete the following table for simple molecules with 2 – 4 electron domains.

Electron Domains	2	3	3	4	4	4
Shared Pairs						
Unshared Pairs						
Shape						
Bond Angle						
Ball & Stick Diagram						

DIRECTIONS: *For each compound listed, draw the Lewis structure and ball and stick diagram. Indicate the shape of the molecule underneath the ball & stick diagram.*

1. PCl_3
2. H_2S
3. CBr_4
4. O_2
5. N_2
6. NH_3
7. CO_2
8. PF_3
9. $CHCl_3$
10. BI_3
11. BeH_2
12. $CSCl_2$