## **CONCEPT: NOBLE GAS COMPOUNDS**

- Among all Group 8A elements, only \_\_\_\_\_ forms stable compounds.
  - □ It reacts directly with \_\_\_\_\_ only and forms \_\_\_\_\_.

## **Noble Gas Compounds**

$$Xe(g) + n F_2(g) \longrightarrow XeF_x(s)$$
 $n = __, __, __$ 
 $x = __, __, __$ 

**EXAMPLE**: A noble gas fluoride is a colorless crystalline solid at room temperature. Which one the following is the most likely formula of this compound?

- a) NeF<sub>2</sub>
- b) HeF
- c) ArF2
- d) XeF4

PRACTICE: Which of the following xenon compounds are too unstable to exist?

- a) XeF<sub>2</sub>
- b) Xel<sub>4</sub>
- c) XeF4
- d) XeF<sub>6</sub>