

Name

Student Worksheet

Write the Lewis structure and predict the shape of each of the following molecules and ions.

1. XeF₄

2. SO₄²⁻

3. SF₄

- 4. I₃⁻
- 5. *(Optional)* How many bonds are formed between the carbons in acetylene, C_2H_2 ? What hybrid orbitals are involved in each bond? How many sigma bonds and pi bonds are present?