Answers to Exercise 5.4 Hybridization

1.

- (a) linear
- (b) trigonal planar
- (c) tetrahedral.

For questions 2 and 3, the best approach is to:

- 1. Add lone pairs to turn the drawing into a proper Lewis diagram
- 2. Determine the electron group geometry for each atom in question
- 3. Choose the appropriate hybrid orbital set based on the electron group geometry



