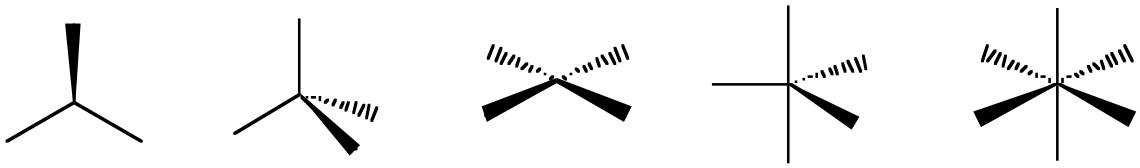
In-class exercise

1. In an aerobic environment, which is most common, Fe^{3+} or Fe^{2+}?

2. Which of the following is the most likely geometry for iron in the oxidation state you chose?



3. Of the ligands, N,O and S, which is most favored for (1) according to HSAB?

4. How can you use the chelate effect to further increase the stability of a complex of (1)?

5. You've just designed a siderophore! Sketch a cartoon of what it might look like.