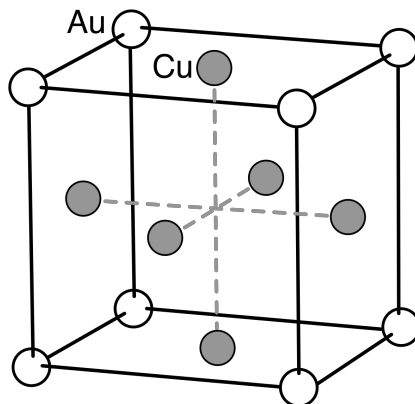Name: _____

Shown below is the cubic unit cell of an alloy between copper (Cu) and gold (Au), where the Cu atoms are on the faces of the cube and the Au atoms are at the corners of the cube.

1. Determine the ratio of Cu:Au by calculating how many copper and gold atoms are present in the unit cell.
2. Is the crystal structure of this alloy face-centered cubic (fcc)? Explain your answer in one sentence.