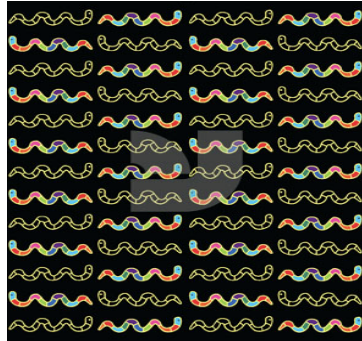
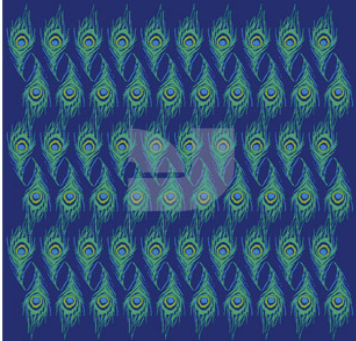
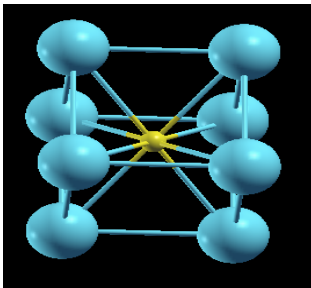


PHYS 425 Solid State Physics - Spring 2013
Instructor: Thushari Jayasekera - Email: thushari@siu.edu
Quiz # 1- 23rd January 2013 (10 points)

- 1). Figure out the type of two-dimensional Bravais lattice for the following decorative patterns. Roughly Mark the Basis.



- 2). The crystal structure of the CsI is shown in the following figure. If you think about the pattern in terms of repeating cubes, we can find Cs ions in the corners of the cube, and I in the center of the cube. What is the Bravais lattice type of this crystal.



- 3) Explain in words the difference between the Primitive unit cell and the Wigner-Seitz unit cell.

- 4) Explain in words the difference between primitive unit cell and the non-primitive unit cell. (You may be familiar with the terms conventional and primitive unit cells instead)