Sample Assessment

1. Name at least three reasons why we need supercomputing simulations in science?
2. What is the main difference in how force interactions are treated by DFT vs MD/MC?
3. What is the main difference between MD & MC as far as how the atom trajectories are calculated?
4. Describe the difference in the mechanism between the two different mesoscopic modeling approaches?
5. What is the Continuity Assumption and why is it important?
6. How are top down (e.g., machine-learning) methods different from physics-based approaches?