Practice Problems for Biochemistry, Session 1: Types of Organisms, Cell Composition

Question 1
You are given four test tubes, each tube contains cells from a different organism. One tube contains bacterial cells, one contains yeast cells (eukaryotic), one contains human cells and the last contains insect cells. Can you identify the cells from each tube if you are given a light microscope? Explain your answer.

Question 2
Which of the following sequences is the best representation of the organizational hierarchy (from complex to simple) found in an individual animal?

Brain, Cerebellum, Nerve cell, Nervous tissue
Cerebellum, Nervous tissue, Molecule, Cell
Organism, Organ system, Tissue, Cell, Organ
Nervous system, Nerve cell, Brain, Cerebellum
Nervous system, Cerebellum, Cell, Molecule