Diffusion, Osmosis, & Cell Transport Worksheet

1. During diffusion, how do the molecules physically get from one place to the other? (Spaceship tractor beam? Winged monkeys?)

2. Consider the solution in the drawing below, with the two sides divided by a perforated membrane. In the blank drawing on the right, show how the solution would look once it has reached equilibrium.

3. Suppose that a cell membrane is permeable to water but impermeable to glucose (sugar). The inside of the cell is hypertonic for glucose, in comparison to the external environment. Using the diagram below, (1) draw what the concentrations of water and glucose would look like at the beginning of the experiment (NOTE the symbols for each molecule shown below), and (2) indicate the direction of movement that would occur during osmosis. Which molecule would move?