

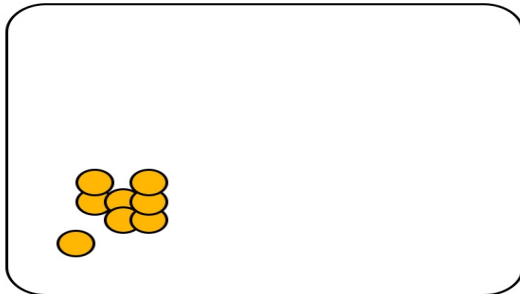
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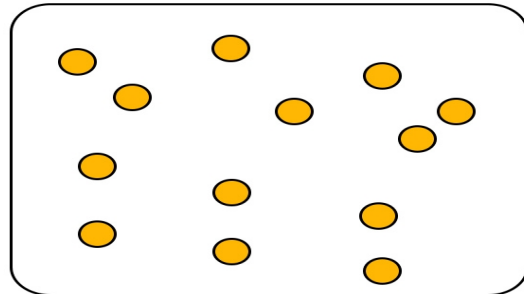
Diffusion and Osmosis

Diffusion is the movement of particles from areas of higher concentration to areas of lower concentration. It is a natural, random process. This means that it does not require extra energy input.

1. Give an everyday example of diffusion in air and in water. AIR: e.g. Scents and Smells WATER: e.g. Colored dye in a glass of water
2. Moths emit chemicals called pheromones to attract a mate.
 - a) Which process is responsible for the distribution of these chemicals through the air?
Diffusion
 - b) If a moth detects pheromones, how might it work out which direction they are coming from?
Detect the higher concentration of pheromones
 - c) What would be the advantage of a moth releasing the pheromones on a night when there was little wind?
The pheromones arent blown away from a potential mate
3. Complete the following sentence: Diffusion is the -Random-movement of particles from -Highconcentration to a -Low- concentration until they are Evenly spread out.
- 4b. Describe the way the particles of a gas move. Randomly
- 4c. Diagram A shows the same number of particles as in Diagram B except most particles start out on one side of the box. Explain why after a while, Diagram A resembles Diagram B.
Molecules move randomly and reach equilibrium



Random Arrows



Random Arrows