For Biology 11, review the following concepts from grade 9:

- organelles for plant and animal cells
- differences between plant and animal cells
- the cell cycle
- mitosis and meiosis remind yourself which one is associated with asexual/sexual reproduction; leads to variety; chromosome number at start and end......
- what is cytokinesis?

## Diffusion:

- movement of molecules from high to low concentration with a concentration gradient.
- No energy needed from mitochondria.
- Example: O<sub>2</sub> & CO<sub>2</sub> exchange in humans or exchange of nutrients or wastes in single celled organisms

**Osmosis:** special form of diffusion for water

• water moves from high to low concentration across a semi-permeable membrane.