## Homework Assignment 01 (Ch. 5)

- 1. Ion channels for sodium and potassium are called *voltage-gated* channels. Summarize why they are called voltage-gated for opening and closing.
- 2. Find out what is the role of chloride and calcium ions in the generation of action potentials.
- 3. What is "Refractory Period" after an action potential?
- 4. Most local anesthetics contain procaine or tetracaine. What is the role of these chemicals and by what mechanism local anesthetics work?
- 5. Read about the works of Hodgkin and Huxley and what is their best contribution in neuroscience? Summarize.