

# Physiology assignment

[Psychology](#)



You recorded the data in Chart 1 on page 35. Use the data to produce a Graph that will clearly show how the effects on the resting membrane potential when the K<sup>+</sup> concentration is high and when the K<sup>+</sup> concentration is low. Hint: take in consideration that independent variable is not a numeric but a category. (4 points) The following questions will require you to do some Web search.

1. Loading is a commonly used anesthetic. What is the molecular composition of Loading. (type of macromolecule and formula) (2 points).
2. List three specific usages of loading (1 point each = 3 points)
- 3.
- 4.

Provide the name of two vendors of loading and four (4) brand names for this anesthetic (1 point each) Vendors Brand Names 1 OFF

5. Explain the precise mechanism behind Loading effect on action potential in nerves. Indicate to what type of integral proteins Loading binds to, the effect on such proteins and what will be the effect on the generation of an action potential and on the transmission of the action potential. (4 points)
6. Loading is commonly administered topically to anesthetize the nerve endings in the dermis that are activated by noxious stimulus resulting in the nerve conduction of impulses that are perceived as “ pain”.

Draw a figure of the transverse section of the skin to show the layers of the epidermis and structures of the dermis (do not forget to include the nerve endings). Use the Diagram to indicate all the layers of cells the Loading has to go through to reach the nerve endings. (Figures copied and pasted from the internet will not be accepted, you have to draw your own version of a figure) (5 points).

7. What cell membrane transport do you suspect moves

Loading from the surface of the epidermis all the way down the nerve endings. (1 point)