

Bi/CNS 150: Problem Set 0

Use this problem set to gauge your understanding of the basic molecular biology necessary to be successful in this course. This problem set will not be graded, but you should complete it to the best of your abilities.

Answer the following with short responses that use the words listed below each question.

1) What is a cell membrane and what is it made of?

- Phospholipid
- Hydrophobic
- Hydrophilic

2) What is the energy currency of the cell?

3) What is a protein?

- Amino acid

4) What is the central dogma?

- DNA
- RNA
- Transcription
- Translation
- Protein

5) What is an amino acid and how do different side chains affect a protein's interactions with its environment?

6) How/where are proteins made?

7) What are some of the ways in which various molecules get to different places in a cell?

8) Describe the function(s) of these major classes of protein.

- Structural
- Enzymatic
- Signaling
- Mechanical