Make a copy of this document, answer the questions, and upload to Canvas.

Visit this <u>Open Stax AP Biology Book and use the information in Chapter 5</u> on structure and function of plasma membranes to answer the following questions:

1. Briefly describe the fluid mosaic model of plasma membranes..

View figure 5.2 to answer questions 2 through 5 below:

- 2. How are phospholipids arranged in the plasma membrane, and how might this structure support the function of the membrane?
- 3. Describe differences you see between protein channels, integral membrane proteins, and peripheral membrane proteins? How do these differences impact their functions?
- 4. What differences do you see between glycoproteins and glycolipids? What are their functions?
- 5. Where is cholesterol (a lipid based steroid) found in the membrane and what is its role?
- 6. How do viruses utilize the structure of cell membranes to infect cells?
- 7. How does understanding the structure of cell membranes help prevent tissue rejection in organ transplant patients?
- 8. How does membrane fluidity support the function of plasma membranes? Be specific.
- 9. Explain why the field of immunology requires in depth understanding of plasma membranes.