

Using diagrams to explain the Fluid Mosaic Model of Membrane Structure

Introduction:

In previous studies, you would have learned that living cells are surrounded by a bounding membrane which controls and regulates the exchange of materials such as nutrients and metabolic waste between the cell and its environment. In order to understand this regulatory function of the membrane, it is necessary to study its structure.

As part of the preparation for your examinations you must be able to draw, label and identify the various components of the cell membrane as depicted by the Fluid Mosaic Model, so named because of its appearance when viewed using the electron microscope. 'Fluid' because the individual phospholipid and protein molecules move around within their layer and 'Mosaic' which describes the pattern of the protein molecules shown scattered through the membrane surface when viewed from above.

<https://www.slideshare.net/jayak1/the-fluid-mosaic-model-of-membrane-structure?ref=https://notesmaster.com/en/group/caribbean/1556-cape-covid19-support/28138-using-diagrams-to-explain-the-fluid-mosaic-model-of-membrane-structure>

Take a look at the videos below to learn more:

https://www.youtube.com/watch?v=96e8QO7XM90&feature=emb_logo

https://www.youtube.com/watch?v=M7ytg7rsQzU&feature=emb_logo

Test your Mastery

1. Draw a simple, clearly - labeled diagram of the Fluid Mosaic model of the cell membrane.
2. Describe the functions of each labeled part.
3. Explain why the cell surface membrane is described as a 'Fluid mosaic'