

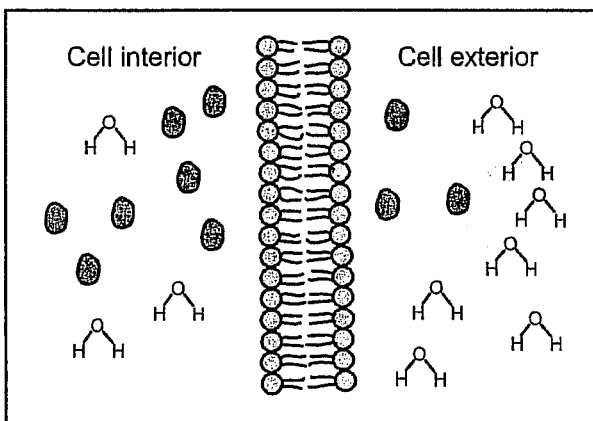
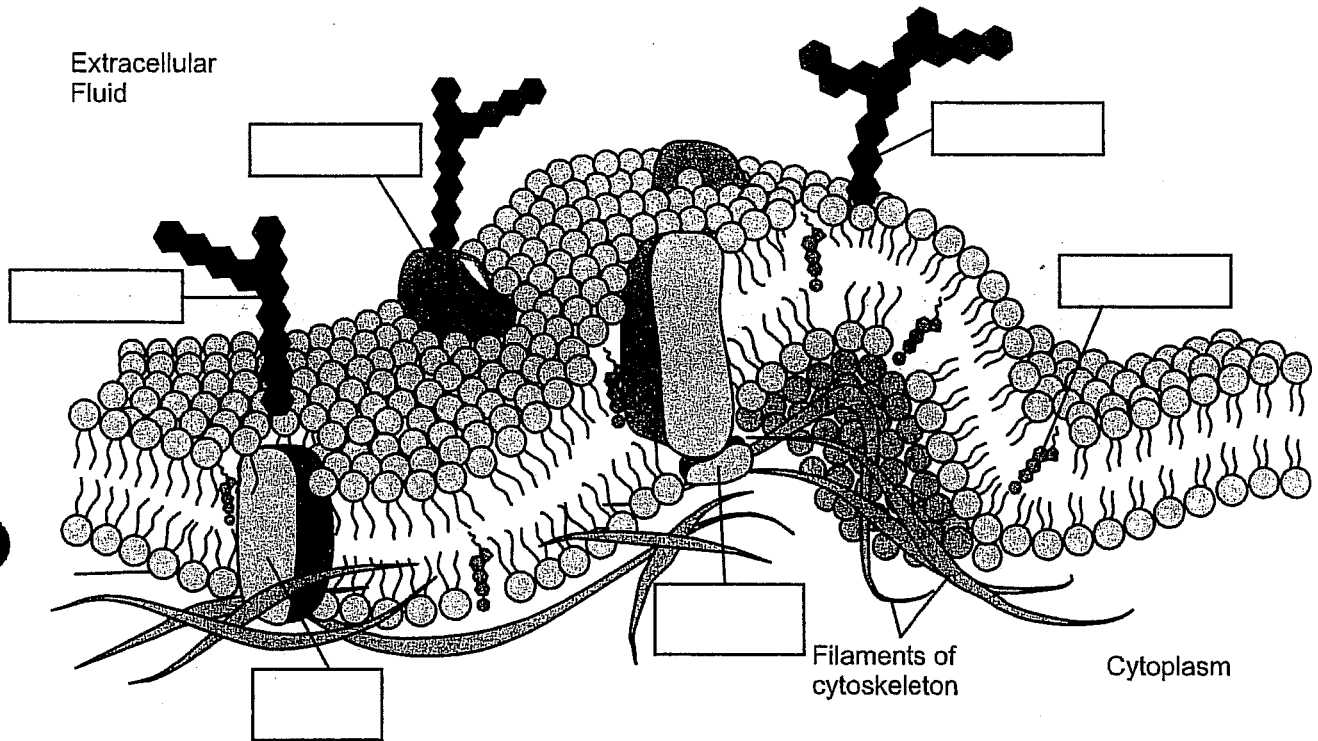
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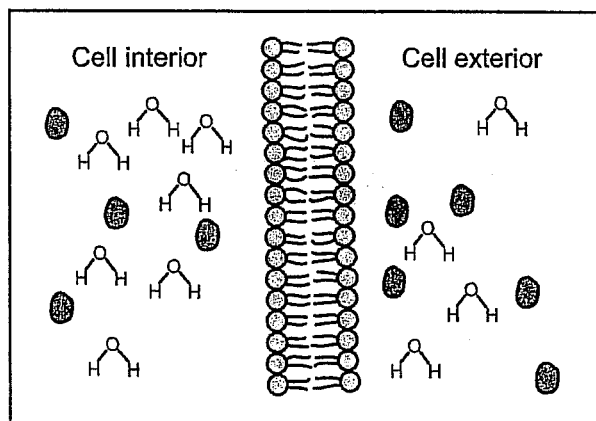
Period _____

The Fluid Mosaic Membrane

Modeling Membrane Structure and Osmosis

PART I





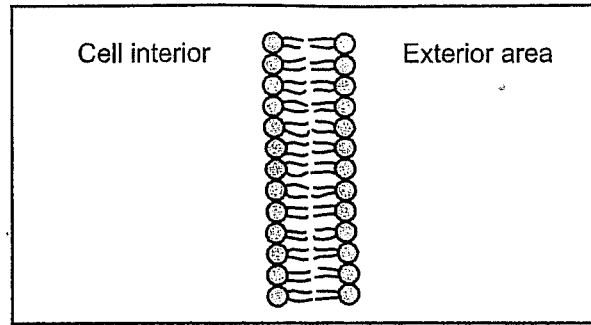


Fig. 4

ANALYSIS

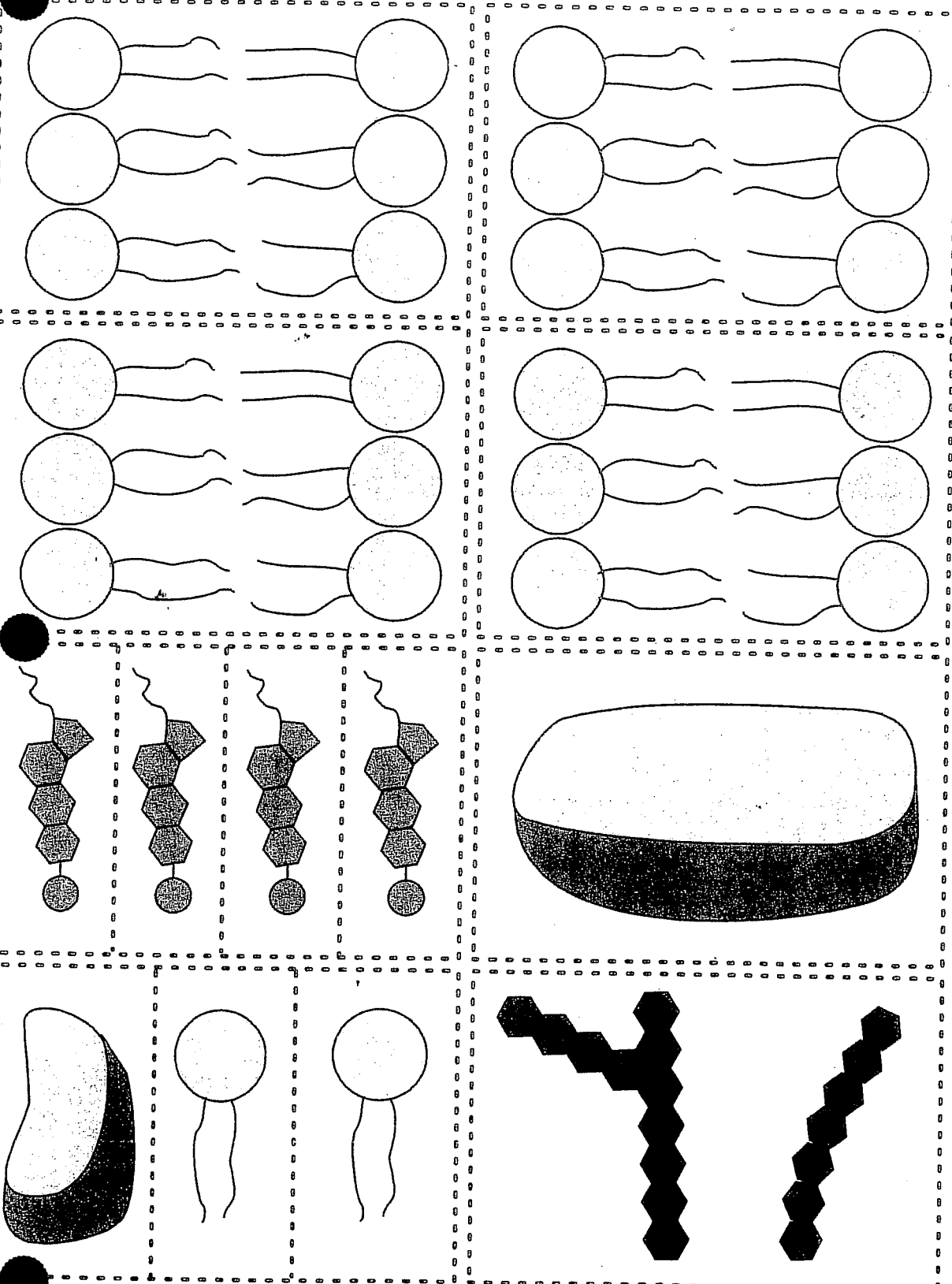
PART I: MEMBRANE STRUCTURE CHART

Functional cellular event	Membrane structural component involved
Hydrogen ions (H^+) are being pumped to the inside of the membrane	
Glucose is entering the cell.	
Water is entering the cell.	
Carbon dioxide is diffusing out of the cell	
The cell is recognized as belonging to a specific tissue.	
Intermediate filaments of the cytoskeleton are anchored in place.	

PART II: OSMOTIC PREDICTIONS

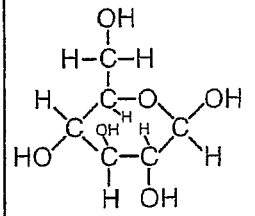
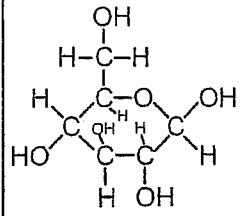
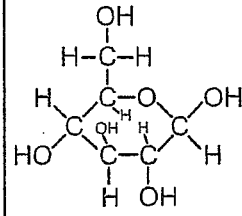
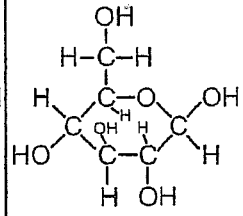
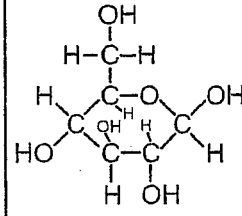
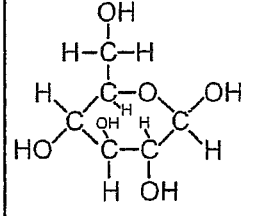
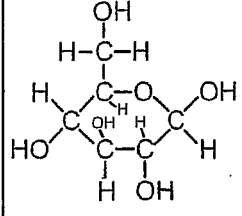
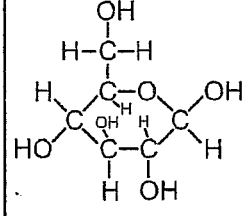
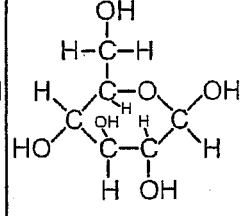
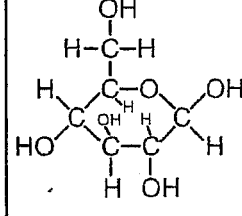
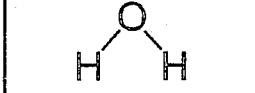
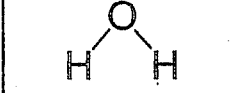
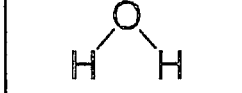
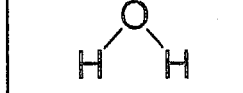
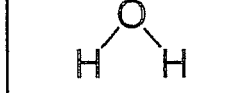
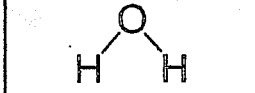
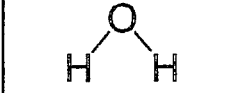
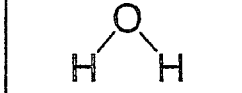
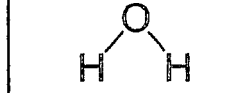
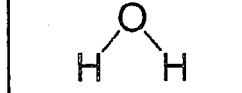
Cell Type	If placed in this solution	Predicted results
Liver cell	Hypotonic	
Onion cell	Hypertonic	
Cheek cell	Isotonic	
Red blood cell	Hypotonic	
Potato cell	Hypertonic	

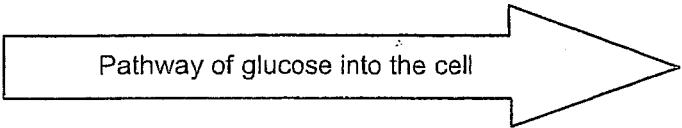
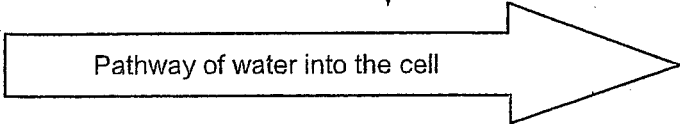
Model pieces – Membrane components



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Model pieces – Glucose, water, and pathway arrows

 <p>Glucose</p>	 <p>Glucose</p>	 <p>Glucose</p>	 <p>Glucose</p>	 <p>Glucose</p>
 <p>Glucose</p>	 <p>Glucose</p>	 <p>Glucose</p>	 <p>Glucose</p>	 <p>Glucose</p>
 <p>Water</p>	 <p>Water</p>	 <p>Water</p>	 <p>Water</p>	 <p>Water</p>
 <p>Water</p>	 <p>Water</p>	 <p>Water</p>	 <p>Water</p>	 <p>Water</p>



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