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| CORNELL NOTESMAIN IDEAS\QUESTIONS | UNIT E, CHAPTER 2.3 - Materials move across the cell membraneNOTES: |
| Cell Membrane | The outer boundary of the cytoplasm, a layer that controls what enters or leaves the cell. |
| Permeable | A substance that materials can flow through. |
| Semipermeable | A substance which only selected materials can flow through. |
| Diffusion | The tendency of a material to move from an area of high concentration to an area of low concentration.  |
| Osmosis | The movement of water through a cell membrane from an area of high concentration to an area of low concentration. |
| Equilibrium | A state of balance or rest due to equal action from opposing forces. |
| Active Transport | The process of using energy to move materials through the cell membrane. |
| Passive transport | The movement of materials across the cell membrane without the input of energy. |
| Hypotonic Solution | Any solution with a lower solute concentration than the normal body cells, causing water to flow into the cell by osmosis. |
| Hypertonic Solution | Any solution with a higher solute concentration than that of a normal body cell, causing water to flow out of the cell by osmosis. |
| Endocytosis | When materials are too big to move through the cell membrane, the membrane folds in, creating a vesicle, which breaks off and moves into the cell. |
| Exocytosis | When materials are too big to move out of the cell membrane, the cell creates a vesicle, which reattaches to the membrane, and opens up to let materials out of the cell. |
| **SUMMARY** |