



## Writing a Summary

<u>Directions:</u> Using your 2-column notes, write a summary of your notes packet. Each slide will be one or two sentences.

- 1. Use the title of your notes to create your introductory sentence
- 2. Use the main idea (left column) as the beginning part of a sentence
- 3. Complete your thought/sentence by adding details to the right
- 4. Include transition words between sentences

First, next, finally, before, after, during, later, also, another, in addition, in conclusion, to sum up, similarly, however, on the contrary, most important, for example, as a result, therefore

5. Proofread your summary for spelling & punctuation



Particles Move In/Out	<ul> <li>Moving Small Particles         <ul> <li>Passive Transport</li> <li>Active Transport</li> </ul> </li> <li>Moving Large Particles         <ul> <li>Endocytosis – move inside</li> <li>Exocytosis - move outside</li> </ul> </li> </ul>
Active vs. Passive Transport	<ul> <li>Passive Transport – moving particles across a membrane WITHOUT ENERGY         <ul> <li>High to low concentration</li> <li>Ex: Osmosis</li> </ul> </li> <li>Active Transport – moving particles across a membrane USING ENERGY (ATP)         <ul> <li>Low to high concentration</li> </ul> </li> </ul>
Cells Make Energy	<ul> <li>Cellular Respiration – how cells making energy using OXYGEN         O2 + Glucose → CO2 + H2O + Energy (ATP)</li> <li>Fermentation – making energy WITHOUT Oxygen         <ul> <li>Often seen in bacteria</li> <li>Glucose + Energy → CO2 + H2O + Energy</li> </ul> </li> <li>Photosynthesis – making food in a plant cell CO2 + H2O + Light → O2 + Glucose</li> </ul>
Cell Division	<ul> <li>Prokaryotic Cells – undergo Binary Fission</li> <li>Eukaryotic Cells – undergo Mitosis</li> </ul>
Phases of Eukaryotic Cell Division	<ul> <li>Eukaryotic Cell Division – 6 steps</li> <li>I Picked My Apples Today Cheerfully         <ul> <li>Interphase</li> <li>Prophase</li> <li>Metaphase</li> <li>Anaphase</li> <li>Telophase</li> <li>Cytokinesis</li> </ul> </li> </ul>

Example Summary: (bold words are the intro sentences, italicized words are transition words)

There are a lot of processes that happen inside a cell to make it work. Particles move in and out of a cell. If they are small, that happens by passive or active transport. On the contrary, if they are large, it happens by endocytosis (moving inside) or exocytosis (moving outside). The difference between passive and active transport is that passive transport moves particles without using energy, but active transport moves particles with energy (ATP). In addition, cells also make energy in three different ways. Cellular respiration is the process of making energy using oxygen, while fermentation makes energy without oxygen. On the other hand, photosynthesis is making energy in plants. Finally, cells have to reproduce. Prokaryotic cells undergo Binary Fission, while eukaryotic cells do Mitosis. Mitosis is split into six phases: Interphase, Prophase, Metaphase, Anaphase, Telophase and Cytokinesis.