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| **Introduction**  **1**  **(Sec 7-1 Notes + Vocab, Pg. 206 in book)**   * **Photosynthesis** is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.   * Photosynthesis is important to **plants** because they use it to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. * Photosynthesis is important to **animals** because without photosynthesis \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.   Draw a picture (color and label) | **5**  **Calvin Cycle**  **(Sec 7-2 Notes, Pg. 212-213 in book)**  The **Calvin Cycle** uses \_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_ to make \_\_\_\_\_\_\_\_\_\_\_\_\_\_.  This happens in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The Calvin Cycle DOES NOT use \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  The **Calvin Cycle** uses stored energy from \_\_\_\_\_\_\_\_\_\_ and  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to make \_\_\_\_\_\_\_\_\_\_\_\_\_\_.  and  Draw a picture (color and label) |
| **2**  **Equation**  **(Sec 7-1 Notes, Pg. 206 in book)**  \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ makes  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  **Balanced Chemical Equation**  **Reactants Products**  Draw a picture (color and label) | **6**  **LDR and Calvin Cycle**  **Connection**  **(Sec 7-2 Notes, Pg. 210-213 in book)**  \_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_ connect the two  photosynthesis reactions. These are made in the **Light Dependent Reaction**.  The **Light Dependent Reaction** uses  \_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_ to store \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  **Calvin Cycle** uses \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ from  \_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_ to make \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  \_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_ come from the **Calvin Cycle**.  Draw a picture (color and label) |
| **3**  **Chloroplast**  **(Sec 7-1 & 7-2 Notes, Pg. 207-208)**   * **Thylakoids** are found in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_.  They are used in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and  contain the \_\_\_\_\_\_\_\_\_\_\_\_\_ that capture \_\_\_\_\_\_\_\_\_\_\_\_. The thylakoid uses \_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_ to make \_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_. * The **stroma** is the \_\_\_\_\_\_\_\_\_ surrounding the \_\_\_\_\_\_\_\_\_\_\_\_. This is where the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ happens.   The stroma uses \_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_, to make \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.   * **Chlorophyll** is found in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of plant cells. Chlorophyll is a \_\_\_\_\_\_\_\_\_\_ that captures \_\_\_\_\_\_\_\_\_\_\_. Plants look green because \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.   Draw a picture (color and label) | **7**  **Energy**  **(Sec 7-3 Notes + Vocab, Pg. 201 and 206-207 in book)**   * To **release energy, \_\_\_\_\_** turns into **ADP** andbreaks a **\_\_\_\_\_\_\_\_\_\_\_\_** bond. To **store energy**, \_\_\_\_\_ turns into \_\_\_\_\_ by adding \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. * All **energy** on Earth comes from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. * In **photosynthesis** \_\_\_\_\_ is produced during the \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. And during the **Calvin Cycle**, \_\_\_\_\_ is used to **produce** **glucose**. * **Glucose** is important to life because it is the main source of   \_\_\_\_\_\_\_\_\_\_\_\_\_\_ for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  Draw a picture (color and label) |
| **4**  **Light Dependent Reaction**  **(Sec 7-2 Notes, Pg. 210-211 in book)**  The **Light Dependent Reaction**  uses \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  to make \_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_.  This happens in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The pigment \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ absorbs \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  during the Light Dependent Reaction.  The **Light Dependent Reaction**  uses high energy \_\_\_\_\_\_\_\_\_\_\_\_\_ to convert  and  Draw a picture (color and label) | **Factors That Affect**  **8**  **Photosynthesis**  **(Sec 7-2 Notes, Pg. 214 in book)**  Factors that affect the rate of photosynthesis include:   1. 3. 2. 4.  * The amount of water can \_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_  the rate of photosynthesis. * Photosynthesis depends on \_\_\_\_\_\_\_\_\_\_ that function best between \_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_. * Light intensity \_\_\_\_\_\_\_\_\_\_ photosynthesis until \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_ is reached. * Carbon dioxide \_\_\_\_\_\_\_\_\_\_ photosynthesis until \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_ is reached.   Draw a picture (color and label) |
| **C**  **My Photosynthesis Book**    Draw a picture that shows the process of photosynthesis. (color and label)  Name:  Period:  Date:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | **A Summary about Photosynthesis**  **9**  **Write a detailed summary** about everything you know about photosynthesis from beginning to end.  **Include**: an explanation about the photosynthesis equation, the reactants and products of photosynthesis, parts of the chloroplast, each step of the two reactions that make up photosynthesis, the significance of energy use, and the limitations of photosynthesis in plants.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |