  **X-Marks the Spot!**

Directions: Determine whether the following features apply to cellular respiration, photosynthesis, or both by placing an X in the appropriate column.

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| --- | --- | --- | --- |
| **Feature** | **Cellular Respiration** | **Photosynthesis** | **Both** |
| **Uses carbon dioxide** |  |  |  |
| **Uses oxygen** |  |  |  |
| **Produces ATP** |  |  |  |
| **Produces pyruvic acid (pyruvate)** |  |  |  |
| **Depends on light energy** |  |  |  |
| **Involves the Krebs Cycle** |  |  |  |
| **Involves the Calvin Cycle** **(dark/light-independent reaction)** |  |  |  |
| **Occurs in autotrophs** |  |  |  |
| **Can occur without oxygen** |  |  |  |
| **Produces carbohydrates (starch)** |  |  |  |
| **Chlorophyll captures light energy** |  |  |  |
| **Forms water from oxygen** |  |  |  |
| **Forms oxygen from water** |  |  |  |
| **Changes carbohydrates into CO2 and H2O** |  |  |  |
| **Changes CO2 and H2O into carbohydrates** |  |  |  |