**Practice Essay Prompts #1**:

Use the diagram below to answer the following question.

1. Describe how photosynthesis and cellular respiration are related in terms of the energy put in verses the energy that comes out.

Use the following terms in your description:   
*Sunlight, CO2, H2O, O2, Glucose, ATP*

ENERGY OUT:

O2 + Glucose

Photosynthesis

ENERGY IN:

Sunlight + H2O + CO2

ENERGY OUT:

CO2 + H2O+ ATP

ENERGY IN:  
O2 + Glucose

Cellular Respiration

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1. Complete the chart by describing energy transformations (transformation = changes) involved in each process.

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| --- | --- |
| Process | Energy Transformations |
| Photosynthesis  (Use the terms sunlight, water, co2, o2, glucose to describe the energy change) |  |
| Cellular Respiration  (use terms glucose, oxygen, ATP, CO2, h2o) |  |

1. In terms of energy, what is the difference between glucose and ATP?

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