**Ecosystem Poster Project**

**Objective: Students will be able to determine the 4 cycles of an ecosystem (the biosphere) and the interrelationships.**

For this project there will be three parts.

**Part 1:** You will be assigned one of the systems of the ecosystem. You will be given one class period to work with students who have been assigned the same system. It is your responsibility to create a small image showing all the parts of the system and an explanation of any transfers and transformations of energy and/or matter. You may confer with the members of your group so that you all have the best product possible. This image will be brought back to your poster group for the next planning session.

**Part 2:** You will return to your group to describe how your system works and identify all the components to your group. Your group is responsible for creating a collaborative poster showing all of the components of each system and how they interconnect through transfers and transformations of energy and/or matter. Your group should have a rough sketch of this poster by the end of this period.

**Part 3:** Your group is responsible for completing the collaborative poster showing all of the components of each system and how they interconnect through transfers and transformations of energy and/or matter. Be sure to review the scoring rubric prior to your completion of the poster.

Your system will be one of the following:

Water Cycle Carbon Cycle Nitrogen Cycle Energy Flow

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| **Ecology Poster Rubric** |

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| *CATEGORY* | **4** | **3** | **2** | **1** |
| *Required Elements* | The poster includes all required elements as well as additional information. | All required elements are included on the poster. | All but 1 of the required elements are included on the poster. | Several required elements were missing. |
| *Labels* | All items of importance on the poster are clearly labeled with labels that can be read from at least 3 ft. away. | Almost all items of importance on the poster are clearly labeled with labels that can be read from at least 3 ft. away. | Many items of importance on the poster are clearly labeled with labels that can be read from at least 3 ft. away. | Labels are too small to view OR no important items were labeled. |
| *Inter-relatedness* | All 4 cycles are correctly connected utilizing colored directional arrows. | 3 of the 4 cycles are correctly connected utilizing colored directional arrows. | 2 of the 4 cycles are correctly connected utilizing colored directional arrows. | 1 of the 4 cycles are correctly connected utilizing colored directional arrows. |
| *Graphics - Relevance* | All graphics are related to the topic and make it easier to understand. All borrowed graphics have a source citation. | All graphics are related to the topic and most make it easier to understand. Some borrowed graphics have a source citation. | All graphics relate to the topic. One or two borrowed graphics have a source citation. | Graphics do not relate to the topic OR several borrowed graphics do not have a source citation. |
| *Attractiveness* | The poster is exceptionally attractive in terms of design, layout, and neatness. | The poster is attractive in terms of design, layout and neatness. | The poster is acceptably attractive though it may be a bit messy. | The poster is distractingly messy or very poorly designed. It is not attractive. |
| *Grammar* | There are no grammatical/mechanical mistakes on the poster. | There are 1-2 grammatical/mechanical mistakes on the poster. | There are 3-4 grammatical/mechanical mistakes on the poster. | There are more than 4 grammatical/mechanical mistakes on the poster. |