**Overview**: The following rubrics can be used to assess the individual project: an evaluation of different solutions to minimize human impact on organisms. Each rubric is aligned to one section of the *Individual Project Criteria for Success*, located on your Culminating Project Student Instructions. Use these rubrics to see if you are doing your best work on your individual project.

**Rubric 1**: Student defines the problem of human impact on organisms, including criteria of success and constraints that might limit possible solutions.

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| **Emerging (1)** | **Developing (2)** | **Proficient (3)** | **Advanced (4)** |
| Student **does not** define the problem of human impact on organisms **and/or** includes **inaccurate or irrelevant** criteria of success and constraints that might limit possible solutions. | Student **accurately** defines the problem of human impact on organisms, including **accurate** criteria of success **OR** constraints that might limit possible solutions. | Student **accurately** defines the problem of human impact on organisms, including **accurate but partial** criteria of success **and** constraints that might limit possible solutions. | Student **accurately** defines the problem of human impact on organisms, including **accurate and complete** criteria of success **and** constraints that might limit possible solutions. |

**Rubric 2**: Student explains the cause of the problem, including whether it is due to a sudden change or gradual changes that accumulate over time.

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| **Emerging (1)** | **Developing (2)** | **Proficient (3)** | **Advanced (4)** |
| Student **inaccurately** explains the cause of the problem. | Student **accurately but partially** explains the cause of the problem, **and may include** whether it is due to a sudden change or gradual changes that accumulate over time. | Student **accurately and completely** explains the cause of the problem, **but does not include** whether it is due to a sudden change or gradual changes that accumulate over time. | Student **accurately and completely** explains the cause of the problem, including whether it is due to a sudden change or gradual changes that accumulate over time. |

**Rubric 3**: Student argues that there are plant structures and animal behaviors that affect the probability of successful reproduction, supporting with evidence from their own and other groups’ projects.

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| **Emerging (1)** | **Developing (2)** | **Proficient (3)** | **Advanced (4)** |
| Student **accurately** argues that there are plant structures and animal behaviors that affect the probability of successful reproduction, but evidence from their own **or** other groups’ projects is **missing or inaccurate**. | Student **accurately** argues that there are plant structures and animal behaviors that affect the probability of successful reproduction, **supporting with general scientific reasoning rather than evidence**. | Student **accurately** argues that there are plant structures and animal behaviors that affect the probability of successful reproduction, supporting with **one source** **of** **relevant** evidence from their own **or** other groups’ projects. | Student **accurately** argues that there are plant structures and animal behaviors that affect the probability of successful reproduction, supporting with **multiple sources** **of** **relevant** evidence from their own **and** other groups’ projects. |

**Rubric 4**: Student explains that global warming likely causes negative effects on many organisms, supporting with evidence from their own and other groups’ projects.

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| **Emerging (1)** | **Developing (2)** | **Proficient (3)** | **Advanced (4)** |
| Student **accurately** explains that global warming likely causes negative effects on many organisms, but evidence from their own **or** other groups’ projects is **missing, inaccurate, or irrelevant**. | Student **accurately** explains that global warming likely causes negative effects on many organisms, supporting with **general scientific reasoning rather than evidence**. | Student **accurately** explains that global warming likely causes negative effects on many organisms, supporting with **one source** of evidence from their own **or** other groups’ projects. | Student **accurately** explains that global warming likely causes negative effects on many organisms, supporting with **multiple sources** of evidence from their own **and** other groups’ projects. |

**Rubric 5**: Student describes their solution to monitor and minimize human impact on their chosen organism.

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| **Emerging (1)** | **Developing (2)** | **Proficient (3)** | **Advanced (4)** |
| Student describes their solution **that does not** monitor or minimize human impact on an organism. | Student describes their solution to monitor and minimize an **irrelevant** human impact on their chosen organism, **which** **is not related to global warming**. | Student describes their solution to monitor and minimize the **relevant** human impact on their chosen organism, **using partial detail**. | Student describes their solution to monitor and minimize the **relevant** human impact on their chosen organism, **using sufficient detail**. |

**Rubric 6**: Student evaluates different solutions by identifying solutions that best meet the criteria and/or constraints of the problem and providing rationales.

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| **Emerging (1)** | **Developing (2)** | **Proficient (3)** | **Advanced (4)** |
| Student evaluates different solutions by identifying **irrelevant** solutions that do not meet the criteria **and** constraints of the problem. | Student evaluates different solutions by identifying **relevant** solutions that best meet the criteria **and** constraints of the problem, but **rationale is missing**. | Student evaluates different solutions by identifying **relevant** solutions that best meet the criteria **and** constraints of the problem and providing **some** rationale. | Student evaluates different solutions by identifying **relevant** solutions that best meet the criteria **and** constraints of the problem and providing **detailed** rationales. |