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| **Strand: Science – Ecology** | | |
| **Topic: Change in Population** | | |
| **Grade: 7th Grade** | | |
| **Score 4.0** | **In addition to Score 3.0, in-depth inferences and applications that go beyond what was taught.**   1. Can convert to different prefixes within units (millimeter to meter…etc) | |
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|  | **3.5** | In addition to score 3.0 performance, in-depth inferences and applications with partial success. |
| **Score 3.0** | **The student:**   1. In all environments, individual organisms that depend on the same resource may compete for that resource when it is limited. Resources that can be limited include food, space, water, shelter, and light (EF.4). 2. Given adequate resources and an absence of disease or predators, populations of organisms in ecosystems can increase at rapid rates. Finite resources and other factors limit their growth (IS.2). 3. Individual organisms are added to a population by birth and removed by death so that populations increase when the number of births is greater than the number of deaths and populations decrease when the number of births is smaller than the number of deaths. 4. Populations do not grow infinitely large in nature because there is always at least one factor, including disease, predators, and availability of resources, that limit the growth of a population.   **The student exhibits no major errors or omissions.** | |
|  | **2.5** | No major errors or omissions regarding 2.0 content and partial knowledge of the 3.0 content. |
| **Score 2.0** | **There are no major errors or omissions regarding the simpler details and processes as the student:**   * Recognizes or recalls specific terminology, such as:  1. Organisms 2. Populations 3. Meter 4. Biotic 5. Abiotic 6. Predator 7. Prey 8. Carrying Capacity 9. Birth Rate 10. Death Rate   **However, the student exhibits major errors or omissions regarding the more complex ideas and processes.** | |
|  | **1.5** | Partial knowledge of the 2.0 content, but major errors or omissions regarding the 3.0 content. |
| **Score 1.0** | **With help, a partial understanding of some of the simpler details and processes and some of the more complex ideas and processes.** | |
|  | **0.5** | With help, a partial understanding of the 2.0 content, but not the 3.0 content. |
| **Score 0.0** | **Even with help, no understanding or skill demonstrated.** | |