Missouri Science Scoring Rubric

Item ID: 933050
Grade: 5
Scoring Guide: 3.LS3.B.1

<table>
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| 2     | This response demonstrates a thorough understanding of using evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving and finding mates by  
   - identifying which plant would likely be more successful in terms of growth and reproduction; and  
   - explaining the answer provided.  
   *The response is clear, complete, and correct.* |
| 1     | This response demonstrates a thorough understanding of one of the two key elements.  
   - identifying which plant would likely be more successful in terms of growth OR  
   - explaining the answer provided.  
   *The response may contain some work that is incomplete or unclear.* |
| 0     | The response provides insufficient evidence to demonstrate any understanding of the concept being tested. |

Exemplar Responses:

**Identification (1 point)**

Plant X would be better at growing and reproducing than Plant Y.

**Explanation (1 point)**

Plant X produces a greater than normal number of seeds. This will increase the chances that the seeds are spread by forces such as wind and movement by animals, which helps the plant reproduce.

Student could also respond with the explanation that more seeds:

- increases the number of seeds that are spread; or
- increases the total proportion of seeds that successfully grow into new plants.