Development and Use of Models: Cell Structures and their Functions

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| Key Elements | Possible Points | Points Earned |
| Model of plant or animal cell is 3-Dimensional and hangs from the ceiling or is on a stand | 5 |  |
| Models include all important structures as listed on the instructions. All parts are labeled. Labels are typed or written neatly with colored markers | 10 |  |
| Model includes information about the functions of each part. This information is accurate, well written, and TYPED. | 15 |  |
| Model is creative, colorful, interesting to look at, and includes a variety of materials | 10 |  |
| Model is well constructed and put together with care. Work is neatly done and represents best efforts. | 10 |  |
| Total Points | 50 |  |

Standards-Based Grading Rubric

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|  | 4 | 3 | 2 | 1 |
| Development of Model | | | | |
| Model is a true and valid representation of the real-life, scientific concept |  |  |  |  |
| Model has a variety of parts that can be used/manipulated by the student to describe/explain the scientific concept |  |  |  |  |
| Model is well designed/constructed, employs appropriate engineering skills, shows creativity, represents students best efforts |  |  |  |  |
| Use of Model | | | | |
| Student describes ways in which the model represents the real-life, scientific concept,  able to relate the model to the concept |  |  |  |  |
| Student uses/manipulates the parts of the model during presentation to describe/  explain/demonstrate the scientific concept |  |  |  |  |
| Presentation proves that the student has a solid/accurate understanding of the concept , student gave best efforts in interacting with model and the audience to explain the concept |  |  |  |  |

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| 4 | Above Proficient: Student demonstrated proficiency and included extra elements that went above the expectation of the learning target. |
| 3 | Proficient: Student demonstated proficiency. Work shows an understanding of the concept and met the expectation of the learning target |
| 2 | Approaching Proficient: Some elements were present, but student needs to include more elements to meet the expectation of the learning target. Some elements may by inaccurate or need further development. |
| 1 | Below Proficient: Student does not show an understanding of the concept. Student needs support and more time to develop the concept and meet the expectation of the learning target. |