Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Pd: \_\_\_

**SCIENCE STANDARD PERFORMANCE RUBRIC**

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| **Big Idea: EARTH IN SPACE AND TIME** | **Assessed at Complexity Level:****3 – STRATEGIC THINKING AND COMPLEX REASONING** |
| **Unit: Sun, Earth, and Moon Relationships** |
| **SC.8.E.5.9 – Explain the impact of objects in space on each other including:*** **the Sun on the Earth, including seasons and gravitational attraction.**
* **the Moon on the Earth, including phases, tides, and eclipses, and the relative position of each body.**
 |
| **Annually Assessed** |
| **MASTERY** | **Performance Indicators** | **BEFORE INST.** | **DURING INST.** | **AFTER INST.** |
| **4** | **EXCEEDING****the Standard** | I can analyze how astronomical bodies in the Solar System affect each other.* Anticipate seasonal changes, tidal patterns, and eclipses given the relative positions of the Sun, Earth, and Moon
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| I can relate the effect of astronomical bodies on each other including the effect of the Sun and the Moon on Earth.* Relate the positioning of the Sun, Earth, and Moon to the passage of time (including years, months, weeks, and days), seasonal changes, tides, and eclipses
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| **3** | **MASTERY** | **I can recall the effect of astronomical bodies on each other, including the effect of the Sun and the Moon on Earth.*** Recall that the positioning of the Earth in its orbit around the Sun affects the seasons we experience (differences in average temperatures)
* Recall that the relative positions of the Sun, Earth, and Moon influence moon phases, tides, and eclipses
* Explain how gravitational attraction influences the orbit of the Earth around the Sun and the Moon around the Earth
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| **2** | **PARTIAL MASTERY** | I can recognize some of the relationships between the Sun, Moon, and Earth.* Identify factors that influence gravitational attraction
* Describe the orbit of the Earth around the Sun and the Moon around the Earth
* Describe the illumination of the Earth and Moon by the Sun
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| **1** | **BUILDING MASTERY** | With help, I can demonstrate partial mastery of some of the simpler tasks listed above, but I still make mistakes. |  |  |  |
| **0** | **NOVICE** | I currently have no knowledge or mastery of the skills and tasks listed above, but I will make an effort to learn them. |  |  |  |