**Star Light, Star Bright**

**Benchmarks: SC.8.E.5.5 Describe and classify specific physical properties of stars: apparent magnitude (brightness), temperature (color), size, and luminosity (absolute brightness).** SUPPORT BENCHMARK: SC.8.E.5.6 Create models of solar properties, including rotation, structure of the Sun, convection, sunspots, solar flares, and prominences.

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| **4** | I can **design/construct** a model to classify our sun, based on solar properties. |
| **3** | I am able to **describe** and **classify** specific physical properties of stars: apparent magnitude (brightness), temperature (color), size, and luminosity (absolute brightness). |
| **2** |  I can **define**:\_\_\_ Stars\_\_\_ Apparent magnitude \_\_\_ brightness\_\_\_ temperature\_\_\_ Luminosity\_\_\_Absolute brightness\_\_\_ H-R Diagram\_\_\_ Main Sequence Stars |  \_\_\_ I can **describe** how temperature relates to the color of a star and **classify** stars using an H-R Diagram.\_\_\_ I can **explain** the **difference** between apparent magnitude and absolute magnitude and how the size of a star affects these properties. |
|  | I can **define:**\_\_\_ Solar properties\_\_\_ Structure of Sun\_\_\_ Convection\_\_\_ Sunspots\_\_\_ Solar Flares\_\_\_ Prominences\_\_\_ Corona\_\_\_ Chromosphere\_\_\_ Core | \_\_\_ I can **use** an H-R Diagram to **classify** our sun based on solar properties.\_\_\_ I can **describe** the structure of the  Sun.\_\_\_ I can **describe** the rotations of the Sun and **explain** the role of convection and magnetism and its influence on sun spots, solar flares, and prominences. |
| **1** | With help, students are able to have partial success with 2.0 and/or 3.0 content. |