**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. | |