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| **Lesson Content** |
| **What Standards (national or state) relate to this lesson?**(You should include ALL applicable standards. Rarely do teachers use just one: they’d never get through them all.) | SC.3.E.5.1 Explain that stars can be different; some are smaller, some are larger, and some appear brighter than others; all except the Sun are so far away that they look like points of light. |
| **Objectives- What are you teaching?**(Student-centered: What will students know and be able to do after this lesson? Include the ABCD’s of objectives: action, behavior, condition, and degree of mastery, i.e., "C: Given a sentence written in the past or present tense, A: the student B: will be able to re-write the sentence in future tense D: with no errors in tense or tense contradiction (i.e., I will see her yesterday.)." Note: Degree of mastery does **not** need to be a percentage.) | Students will be able to (1) explain that stars look like points of light because they are so far away, (2) recognize and explain that stars have different properties including brightness and size, (3) recognize and explain that start have different properties including temperature, (4) and recognize and explain that stars have different properties including color. |
| **Evaluation Plan- How will you know students have mastered your objectives?**Address the following: * What formative evidence will you use to document student learning during this lesson?
* What summative evidence will you collect, either during this lesson or in upcoming lessons?
 | Formative: Ability to answer the questions throughout the reading, buddy read, and discuss.Summative: Completion of the foldable and answering the questions at the end of each unit (Six in total) |
| **Lesson Implementation**  |
| **Step-by-Step Plan**(What exactly do you plan to do in teaching this lesson? Be thorough. Act as if you needed a substitute to carry out the lesson for you.)Where applicable, be sure to address the following:* How will materials be distributed?
* How will students transition between activities?
* What will you as the teacher do?
* What will the students do?
* What student data will be collected during each phase?
* What are other adults in the room doing? How are they supporting students’ learning?
* What model of co-teaching are you using?
 | Time  | Who is responsible (Teacher or Students)? | Each content area may require a different step-by-step format. Use whichever plan is appropriate for the content taught in this lesson. For example, in science, you would detail the 5 Es here (Engage/Encountering the Idea; Exploring the Idea; Explanation/Organizing the Idea; Extend/Applying the Idea; Evaluation).Video on myon: Stars/Estrellas Please get out your science books and open to page 158THE NIGHT SKYHow many stars can you see at night? (A lot)Which star is closest to Earth? (The sun)Why does the sun look so much larger than other stars? (The sun is much closer to Earth than other stars are)Read page 158Have one student read the definition of a starAre there any stars that we can see during the day? (One – the sun)Why can’t we see other stars at night? (During the day the light from the sun washes out light from other stars)Have students read page 159 What is a star? (A glowing ball of hot gases)Do you think it used to be easier for people to see the stars at night? Why or why not? (Yes because there were fewer bright cities with bright lights [that wash out other stars])The planet Jupiter is farther away from the sun than Earth is. What do you think the sun would look like from Jupiter? Turn the page to 160PROPERTIES OF STARSAt what point are you able to see stars in the sky? (When the sky is dark enough that starlight can be seen) Why do you think that only a few stars are only visible at first? (They are brighter, bigger, or closer to us)Have student read the heading (Properties of stars) Introduce and make foldable Have the students buddy read pages 160-161What is a property? (Something about an object that you can observe with your senses)What are the two properties discussed on these pages? (Brightness and size) What is brightness? (Brightness is the amount of light that reaches your eye from an object such as a star)What is size? OTHER QUESTION? Foldable Turn to page 162 Buddy read pages 162-163 What is the property discussed in this section? (Temperature) What is temperature? (Temperature is how hot or cool something is) Are all stars the same temperature? (No, some are hotter than others)How does a stars temperature affect the way it looks? (The temperature of a star helps determine its color and brightness)As the temperature of the pot changes, its color changes. How does the color of the pot change as it gets hotter? (It changes from black to red, to orange, to yellow, to while, to blue)Foldable Over time, the sun will become cooler. What can you infer about the color of the sun? (The sun will change from yellow to red) Turn to page 164Buddy read pages 164-165What is the property discussed in this section? (Color) What are the colors of the stars that you see in the photograph? (Blue, white, red) Point out Betelgeuse and Rigel. Which star is cooler? (Betelgeuse) Who disagrees? Who agrees? Why do you agree? (Betelgeuse is red and Rigel is blue so Betelgeuse is cooler) What two properties play a role in how bright a star is? (Brightness depends on surface temperature and size) What is the difference between red stars and blue stars? (Red stars have a cooler surface temperature than blue stars)If a star looks brighter than another star, does that always mean it is bigger than the other stars? (No. A smaller star with a hotter surface temperature may appear brighter than a larger, cooler star. A smaller star may be closer to the Earth and appear brighter)Finish foldableWrap up lesson, have students share the properties of stars that they found throughout the reading |
| **Meeting your students’ needs as people and as learners** | **If applicable, how does this lesson connect to the interests and cultural backgrounds of your students?** |
| **Differentiation—based on the needs of your students how will you take individual and group learning differences into account.** | The myon story is in both English and Spanish, which allows the English Language Learner student to enjoy the story and get the most out of the story. The seating arrangement also pairs up students that would work well together and are at more equal academic levels.  |
| **Relevant Psychological Theories and research taken in consideration when planning this lesson**  |  |