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| Topic/Theme  Duration | Observing Stars  1 hour |
| Essential Question  Objective | What can you observe about stars?  Students will be able to observe a star and identify it’s four properties. |
| Standards | 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.  SC.3.N.3.3- Recognize that all models are approximations of natural phenomena; as such, they do not perfectly account for all observations. |
| Vocabulary | Star- glowing ball of hot gases  Properties- something about an object you can observe with your senses  Brightness- amount of light that reaches your eye |
| Questions | * What is a star? * Think about what we know about the sun. How can we use what we know about the sun to give a definition to all stars? |
| Step by Step Procedure | 1. Read the essential question. Ask what exactly is a star? (scaffolded question) If students can’t answer that, I will say, think about what we know about the sun. How can we use what we know about the sun to give a definition to all stars? 2. Ask students to take out science notebooks and turn to a blank page. Model for the students what to put at the top of their notebook (What can we observe about stars?) 3. Students will make a bulleted list of observations as I click through the prezi. Give students about 2 minutes per slide to jot any observations they have.   *Anticipated responses:*  *-Some stare are brighter than others*  *-stars can be different colors*  *-some stars are big and some stars are small*  *-some stars look like dots in the sky*  *-person using a telescope*  4. After students have completed their observations, let students turn and talk with their science partner about some observations they discovered, allow students to add to their list anything their partner says that they might of missed.  5. Call the class back together and have a discussion about what the observations were that we found. As students are sharing their observations, write their findings on a piece of paper under the elmo.  6. Once all observations are written, ask students this question: Based on your observations, what could be some properties of stars?  (scaffolded question) What is a property? (A **property** describes how an object looks, feels, or acts.)  (scaffolded question) Refer to our properties of matter poster, based off of what you know about properties of matter, what could be some properties for stars?  7. Once the question is clearly understood, have students turn and talk with their tables about what some properties of stars might be.  8. Bring students back together, discuss the properties of stars based off of our observations and the photographs.  *Answer: brightness, size, temperature, and color*  9. Once students know the properties, explain the procedures of how to make our Properties of Stars foldable. Have the students fold their piece of paper in half, leaving just alittle bit hanging off to write the title. Once the paper is folded, we will put 4 sticky notes on the inside of the foldable. On each sticky note we will label the four properties- brightness, size, temperature, and color. |
| Misconceptions | * All stars are the same distance form the Earth. * Stars leave the sky during the daytime. * All stars are the same size. * Stars are all white and have no colors. * Stars are evenly distributed through a galaxy or throughout the universe * There are stars dispersed throughout our solar system. * Moon and sun are about the same size.  Stars are smaller than sun or moon. |