

Title: The Night Sky

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Subject Area/ Grade: Science/ 3rd Grade

Students will learn to understand constellations, the brightness of stars, and patterns/visibility in the night sky.

Goals

The goal of this project is for students to demonstrate their knowledge about constellations and the brightness of stars as well as patterns and visibility in the night sky.

Content Area and Standards

5-ESS1-1. Support an argument that differences in the apparent brightness of the sun compared to other stars is due to their relative distances from Earth. [Assessment Boundary: Assessment is limited to relative distances, not sizes, of stars. Assessment does not include other factors that affect apparent brightness (such as stellar masses, age, stage).]

5-ESS1-2. Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky. [Clarification Statement: Examples of patterns could include the position and motion of Earth with respect to the sun and selected stars that are visible only in particular months.] [Assessment Boundary: Assessment does not include causes of seasons.]

Activity

Students can choose their own creative expression to represent their knowledge about the constellations and brightness of stars along with the patterns and visibility in the night sky.

Joy2Learn Artists /Videos that Support Project

- Architecture: Frank Gehry
<https://www.joy2learn.org/architecture-with-frank-gehry/my-dreams/my-dreams-come-true/>
- Hector Elizando, actor: https://youtu.be/_7CtoDkNAD0

- Powerful effects of drawing: <https://www.youtube.com/watch?v=hntHGr8JR7o>

Art Forms that May Be Included

Drawing, Acting, Model/display, Creative Writing

Connections to Students Passion Areas and Interests

Students can choose art modalities they feel most self expressed whether it is drawing, acting out a play or skit, creating models, or any form of creative writing.

Materials Needed

Research notes, Constellation handbook, Amplify science constellation student apps

Collaborators

Students will work in groups

Assessment

Students will be able to choose how to represent their knowledge after researching about different constellations and the brightness of stars as well as the visibility in the night sky. There will be a student centered rubric and students will be able to summarize what they have learned and teach each other using various creative forms.

Timeline

Students will have 1 week to brainstorm with a group, create, and present their projects.