Activity 11: Illustrating the Northern Lights

Time: 1 class periods (1 class period = 45 min)

Materials:
- Black or other dark construction paper
- Oil or Chalk Pastels
- Strips of white paper (for captions)

Standards Addressed:
- NGSS: (standards addressed by this lesson will vary based on class discussion emphasis)
- Alaska Cultural Standards: E.4 (additional standards will vary based on class discussion emphasis)
- Iñupiat Learning Framework: [B]E.e.3.4 (additional standards will vary based on class discussion emphasis)
- Iñupiaq Cultural Values: Cooperation
- Alaska Science Content Standards: F.2 (additional standards will vary based on class discussion emphasis)
- Alaska English/Language Arts Content Standards: RSIT K-5 Grade 5:9, SL K-5 Grade 4:1, SL K-5 Grade 5:1

Background Information:
The Learning through Cultural Connections: The Northern Lights activity kit emphasizes physical and Earth science processes as well as Iñupiaq stories, dances, songs and terminology related to the northern lights. This final lesson is designed to serve as cumulative review of the unit. For additional background information about the northern lights from both knowledge systems, please see the “Background Information” sections of the previous lessons in this manual.

Assessments:
- Student illustrations, captions and discussion will provide a means of assessing student ability to:
  - Relate ideas about the northern lights from different knowledge systems;
  - Illustrate and describe the northern lights as they occur in the world around them;
  - Understand that some individuals, cultures, and societies use other beliefs and methods in addition to scientific methods to describe and understand the northern lights.

Activity Instructions:
1. Ask students to work with a partner to read page 14-15 of the KiuχuyatNS/KiugaŋNP The Northern Lights Elementary Guide.
2. Work with the class to create a cumulative concept map about the northern lights on the whiteboard or an easel pad. Title the map: “What have we learned about the northern lights?” Categories of knowledge that emerge might include: cultural knowledge, science processes, vocabulary, etc.
3. Distribute a piece of black paper, pastels, and a strip of white paper to each student. Ask students to illustrate the northern lights using the pastels on the black paper. Ask students to include in their illustration at least one thing that they learned during this unit, then write a short caption (on the white paper) that begins with the words: I learned that...
4. Display student artwork in the classroom or hallway.

Connections and Extensions:

- Create a Comic Strip! Provide students with story starters to help them create a comic strip about the northern lights. Story starters might include:
  - Describe the adventures of two daring friends who find themselves walking home beneath the northern lights.
  - Write a comic about an energetic solar particle's journey through space.

- Aurora Reflections! Ask students to create their own concept maps about the northern lights and then work with a peer to expand them.

- Glow-In-The-Dark Aurora! Use glow-in-the-dark paint to create aurora scenes on dark paper. Hang the scenes in a school hallway and then turn off the lights to see the northern lights glow!
I learned that

I learned that

I learned that

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I learned that

I learned that