

Aurora PowToon

This activity is going to give you the opportunity to imagine you are a scientist. It will provide you with a basic understanding of the aurora borealis and help you create observations. Scientists collect data for their investigations using observation as a tool. They must be creative when writing descriptions of what they observe. Before scientists studied things using spacecrafts and computers, the tool they used most was their eyes. Scientists today still use their eyes to carefully observe phenomena they are studying. When looking at the aurora, scientists look for changes they see in color, shape, and size. They create descriptions so that they know if they are seeing the same effect over time, or if something looks entirely new. You will create a presentation with your data.

Task 1: In your groups view the pictures that are attached to this assignment. Answer the prediction questions in the data chart. Only fill out the prediction column of the chart.

Prediction #1: Where do you think this experience is taking place?

Prediction #2: What time of year is this taking place?

Task 2: In your groups view the video attached to this assignment. Answer the prediction questions in the data chart. Only fill out the prediction column of the chart.

Prediction #3: What makes this experience appear?

Prediction #4: What are the different colors that could possibly be displayed?

Task 3: In the space below the data chart make a hypothesis about what you think is occurring in the pictures and video and how it occurs.

Task 4: Gather evidence. Read the reading attached titled *Aurora Borealis*. As you are reading find evidence that supports or denies your predictions. Record your proof in the correct column.

Task 5: Class discussion

Task 6: Share your data. Your group will create a PowToon presentation displaying your data (www.powtoon.com). *The following must be included in your presentation.*

- What are the aurora
- What do they look like
- Where/when can you see them
- What makes the aurora occur
- Different colors of the aurora
- Include at least 5 pictures
- Include background music

Task 7: Present PowToon to the class

Task 8: Below your original hypothesis on the data chart, write a statement proving or denying your hypothesis.