Predicting the Aurora Scavenger Hunt

Overview:

Students navigate the Predicting the Aurora Unit of the *Aurora Alive* multimedia video playlist to find the answers to question on the STUDENT WORKSHEET: "Predicting the Aurora Scavenger Hunt."

Objectives:

The student will research information by interacting with the *Aurora Alive* DVD.

Materials:

- *Aurora Alive* multimedia video playlist
- STUDENT WORKSHEET: "Predicting the Aurora Scavenger Hunt"

Activity Procedure:

Distribute the *Aurora Alive* playlist and the STUDENT WORKSHEET: "Pre-dicting the Aurora Scavenger Hunt." Ask students to complete the worksheet by navigating the DVD to learn the answers to the questions.

Answers to Student Worksheet:

1. *1994*
2. *Earth's magnetic field*
3. *true*
4. *sunspots; coronal holes*
5. *sunspots*
6. *coronal holes*
7. *southward*
8. *density*
9. *where the aurora can be seen*
10. *http://www.gi.alaska.edu*

Name:_____ **Student Worksheet**

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Directions: Use Unit 8 of the *Aurora Alive* playlsit to help you answer the questions below.

1. The Geophysical Institute began publishing weekly aurora forecasts in _____.

2. To make auroral predictions, Professor Emeritus Charles Deehr compared the 27-day rotation of the sun with the disturbances to what?
   _____

3. True or False: The speed of the solar wind can determine the brightness of the aurora glow.

4. What two sources do solar winds come from? _____ and _____.

5. _____ often are the source of strong solar winds, solar flares, and other large eruptions from the sun's surface that can be used to predict the aurora.

6. _____ are high-temperature regions that show up as large black holes on X-ray photographs of the sun.

7. Strong auroral displays can be predicted when the sun's magnetic field is traveling past Earth in a _____ direction.

8. When the thickness or _____ of particles in the solar wind increases, the aurora glows bright.

9. Daily aurora forecasts contain a description and a map that show what?
   _____

10. Where can aurora forecasts be found on the Internet? _____

